

NOTE – This is a sample plan on what is expected for class. Gray boxes offer information to you in preparing the plan.

WILDLIFE MANAGEMENT PLAN FOR RISING STAR RANCH

By

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We certify this represents our own work, submitted in partial fulfillment of the requirements for Wildlife Habitat Management (WFSC 406) at Texas A&M University, Department of Wildlife and Fisheries Sciences.

Management plan prepared

for

Rising Star Ranch
Becky Nichols

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NOTE – The format, font type, etc. is up to your group. What is important is that the basic information is included in each plan.

Wildlife Management Plan for Rising Star Ranch

EXECUTIVE SUMMARY

Management goals for the Rising Star Ranch are to (1) manage for native upland game species, (2) restore improved pastureland to native grasslands to benefit grassland birds, and (3) manage for migratory and non-migratory waterfowl species. Goal 1 practices will benefit upland game species through a prescribed fire plan and feral hog trapping. Goal 2 practices will include reseeding improved pasturelands and a prescribed fire plan to increase forage and improve nesting habitat for grassland birds. Goal 3 practices will improve waterfowl habitat by planting cover and forage, and with the installations of nest boxes. The proposed management practices will allow the landowner to qualify for wildlife exemption under HB 1358, Proposition 11 with the following 4 management practices: (1) habitat control, (2) predator control, (3) providing supplemental food, and (4) providing shelter. The estimated annual cost for plan implementation is \$4,900 the first year and \$1,200 in subsequent years.

Executive Summary - summarizes principal points of management plan for the reader. It is the abstract of the plan. Write the summary after completing the plan.

PURPOSE

The purpose of this management plan is to enable the landowner to qualify for the agricultural tax exemption under HB 1358, Proposition 11 by managing the property for wildlife. Landowners seeking the exemption must file a management plan with the state. Texas Parks and Wildlife Department (TPWD) lists 7 qualifying management practices: habitat control, erosion control, predator control, providing supplemental water, providing supplemental food, providing shelter, and conducting census counts. Landowners must complete a minimum of 3 eligible practices to qualify for the exemption. Here we describe a management plan that addresses the landowner's goals and qualifies her property for the wildlife exemption under Proposition 11. In our plan, we begin by providing background to the Rising Star Ranch and goals of the landowner, followed by a feasibility assessment addressing target species needs, target areas, constraints, and costs associated with each management practice. We conclude our plan by outlining final recommendations to the landowner. This plan also will fulfill partial class requirements for Wildlife Habitat Management (WFSC 406) at Texas A&M University.

Purpose - this section briefly introduces the reader to the purpose of the plan. Answers the question "why are we doing this plan"?

OWNER INFORMATION

The Rising Star Ranch is owned by Becky Nichols, a retired veterinarian from Houston, Texas. Ms. Nichols wishes to restore the ranch to its natural state and is interested in a long-term management plan to aid her in achieving her goals.

Owner Information – information about property owner/client.

PROPERTY DESCRIPTION

The Rising Star Ranch is a 200-acre tract located in Austin County, Texas, approximately 5 miles from Bellville, Texas (Figure 1). The Rising Star Ranch is located in the Oak-Prairie Ecological Region of Texas (Gould 1976). The dominant soil type is loamy sand with clayey soils restricted to riparian zones. In Austin County, mean annual precipitation is approximately 40 inches, mean annual temperature is 68° F, and the frost-free period is estimated at 275 days (S.M. Tracy Herbarium

Property Description – property location/legal description, size of area, historical/current land use, biological description (soils, topography, cover type, flora, fauna, etc.). Include a (1) general locator map and (2) vegetation cover map, and (3) other maps that you feel are important. Recommended sections include (1) physical description, (2) flora/fauna, and (3) historic/current land uses.

2002).

The ranch is a mixture of grasslands (90 acres) and wooded areas (110 acres) (Figure 2). Grassland areas include a variety of native grasses and shrubs, such as sideoats grama (*Bouteloua sp.*), little bluestem (*Schizachyrium sp.*), western ragweed (*Ambrosia cumanensis*), switchgrass (*Panicum virgatum*), and wax myrtle (*Myrica cerifera*). Some non-native grasses such as dallis (*Paspalum dilatatum*) and bahia (*Paspalum notatum*) also are present. Wooded upland areas are dominated by post oak (*Quercus stellata*), yaupon holly (*Ilex vomitoria*), slash pine (*Pinus elliottii*), and hackberry (*Celtis laevigata*). A 3-acre pond is found on the property approximately 200 yards south of the homesite.

Historically, the property was used for cattle grazing. Currently, the property is used by Ms. Nichols for weekend retreats. Upon acquiring the property, Ms. Nichols decided to restore the Rising Star Ranch to a more natural state beneficial to native wildlife. Several management practices have been implemented on the property in the last several years including the conversion of improved pastureland to native grasslands, and the use of supplemental food plots and free choice feeders. Annual bird counts also are conducted on the property to evaluate the response of management practices to native bird populations.

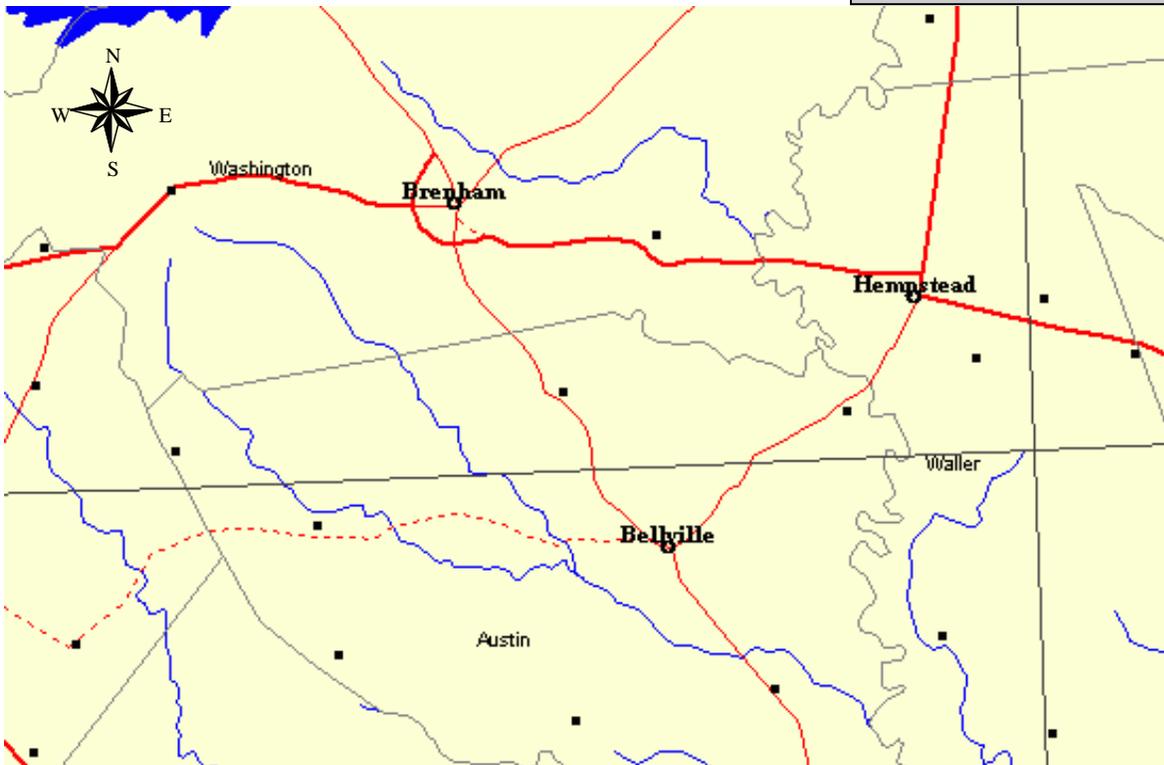
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National Atlas of the United States.

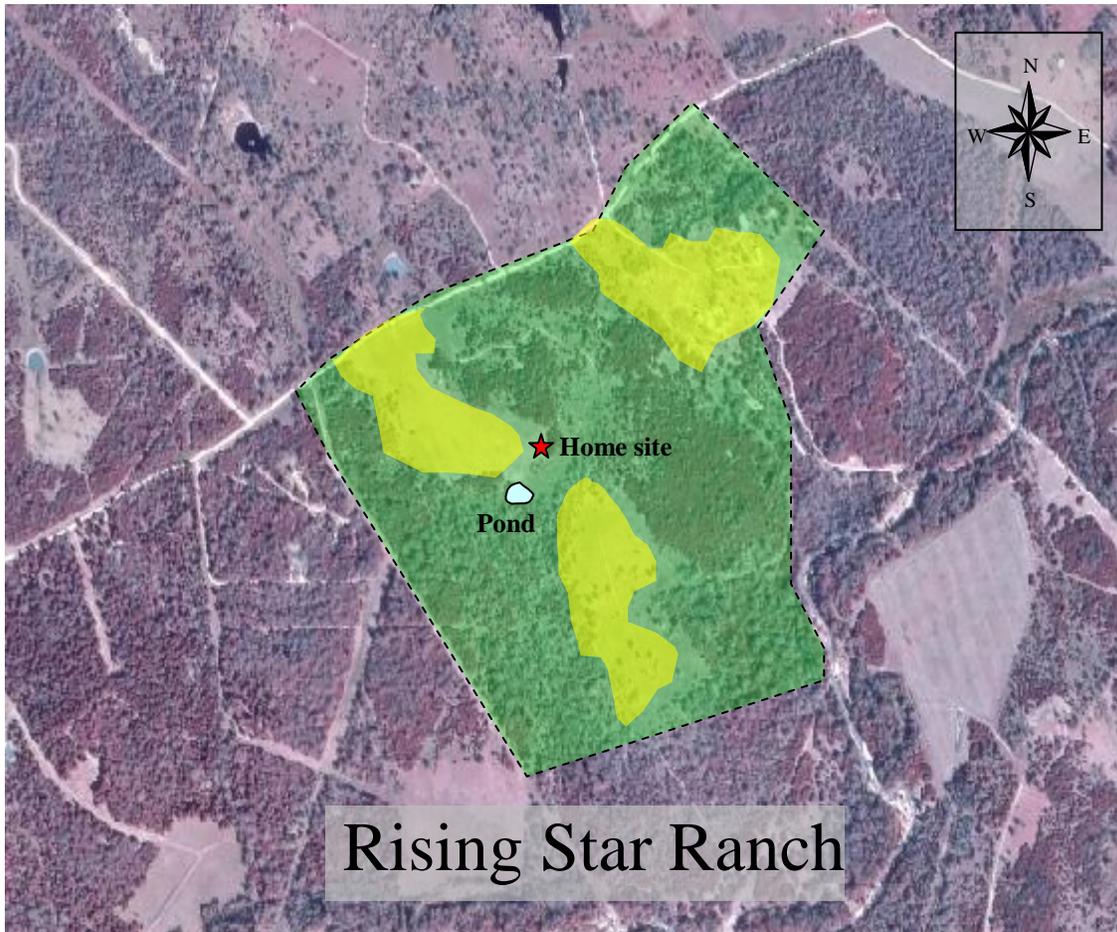
Source:

Property Maps can be made in ArcGIS or from maps off the web. A good map source that allows you to generate a map from the web is <http://nationalatlas.gov/>

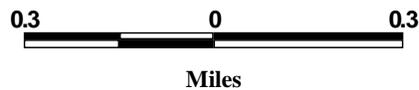
Maps should have all features (i.e., scale, source, etc.) discussed in class.

Figure 1. General location of the Rising Star Ranch (red star) in Bellville, Texas, 2004.





Grassland
 Woodlands



10 May 2004

Drawn by: Chris Miller

Figure 2. Vegetation cover types on the Rising Star Ranch, Bellville, Texas, 2003.

TARGET SPECIES

The target species for the Rising Star Ranch range from large mammals to various avian species. Upland game species of interest include white-tailed deer (*Odocoileus virginianus*), northern bobwhite (*Colinus virginianus*), and mourning doves (*Zenaidura macroura*). Target grassland bird species are the savannah sparrow (*Passerculus sandwichensis*), grasshopper sparrow (*Ammodramus saviarum*), lark sparrow (*Chondestes grammacus*), eastern meadowlark (*Sturnella magna*), and dickcissel (*Spiza americana*). Wood ducks (*Aix sponsa*), mallards (*Anas platyrhynchos*), and black-bellied whistling ducks (*Dendrocygna autumnalis*) are the primary target waterfowl species.

Target species – identify species targeted for management. Normally, species are stated within the landowner’s objective.

GOALS AND OBJECTIVES

Landowner Goals

1. Manage for native upland game species on the property.
2. Restore improved pasturelands to native grasslands to benefit grassland birds.
3. Manage for migratory/non-migratory waterfowl species.

Management Objectives

1. Conduct a feasibility assessment to identify 1 or more viable management practices.
2. Recommend practice(s) to the landowner that would best achieve her goals.

Goals and Objectives – *Goals* are specified by the landowner (what the property is to look like). Each management plan will have 3 goals (each team member will do 1 goal). *Objectives* will be used to address each goal as follows:

1. Conduct a feasibility assessment to identify 1 or more viable management practices.
2. Recommend practice(s) to the landowner that would best achieve her/his goal.

Each plan should include a *minimum of 3 different practices each year* (required to receive the tax-exemption).

Recommendations

GOAL 1: MANAGE FOR NATIVE UPLAND GAME SPECIES

The first goal for the Rising Star Ranch is to implement management practices that will improve habitat for native upland game species.

RECOMMENDATIONS

Habitat Control

Habitat control (TPWD qualifying practice) will be accomplished through the use of annual prescribed burning. Prescribed fire is an effective management tool used to manipulate succession of grassland areas, and stimulate forb production important for white-tailed deer and northern bobwhites (White and Hanselka 2003, Dillard 2004). Other benefits include the enhancement of suitable nesting and loafing cover for northern bobwhites. We identified 9 burning units within the 3 grassland areas on the Rising Star Ranch (Figure 3). We propose that 3 units (a total of 30 acres) be burned each year on the ranch (Table 2). Prescribed fires will be conducted each year during the late fall to early spring (October-March) when fuel conditions and weather are normally favorable.

The proposed burning plan will provide a mosaic of various aged grasslands (0-3 years of age). The target species identified have different life history requirements which can be provided using staggered burns. Furthermore, the proposed fire schedule also will serve in maintaining the existing native grassland areas. Texas Parks and Wildlife guidelines require that at least 15% of the total area be burned each year to qualify for the habitat management practice (habitat control, TPWD Wildlife Management Plan Overview - Intensity Levels). Our recommendations would qualify the Rising Star Ranch for habitat control practice each year.

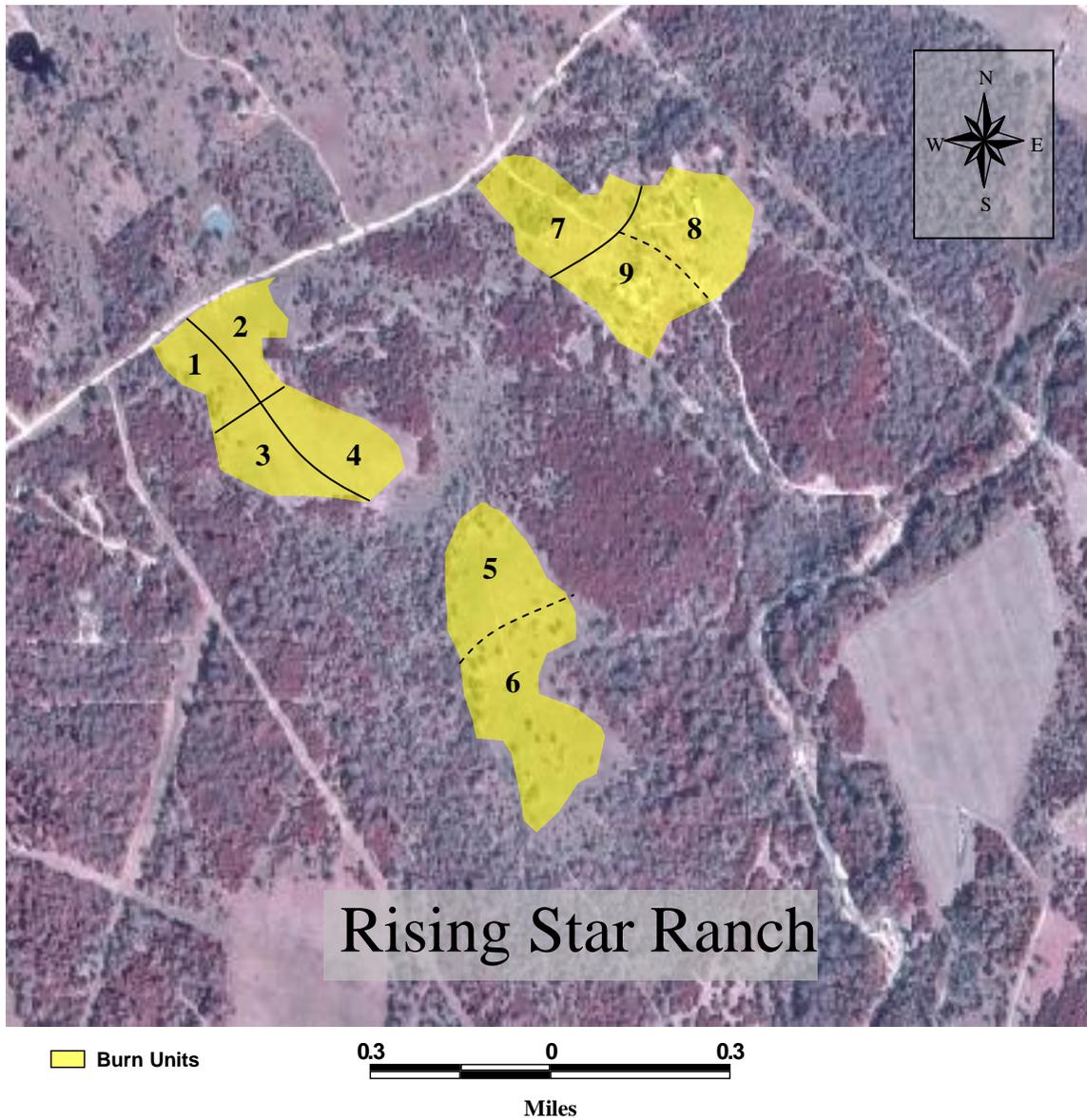
Proposed Target Areas

Prescribed fire will be used to enhance existing grasslands on the Rising Star Ranch (Figure 3). We propose

Recommendations - Outline your proposed management activities referring to your feasibility assessment (i.e., species requirement, constraints, etc.) to support your recommendations. Recommendations should follow guidelines provided by Texas Parks and Wildlife, and should include *at least 1* qualifying management practice. The final plan (all team member sections) should include a *minimum of 3 different practices each year* (required to receive the tax-exemption). In this section, 1 practice (prescribed fire = habitat control) is proposed. Note the intensity levels (i.e., number of acres, etc.) is mentioned.

Proposed Target Areas – identify the area in the land owner where the proposed management activities are to occur or could occur. You should include a map in this section identifying those areas.

the 3 grassland areas be divide into 10-acre burn units (9 total units) to be burned on a rotational basis. In doing so, habitat control via the use of prescribed fire can be considered a qualifying practice for the property each year.



10 May 2004

Drawn by: Chris Miller

Figure 3. Proposed burn units on the Rising Star Ranch, Bellville, Texas, 2003. Dashed lines represent proposed fire lines to be constructed prior to fire prescription.

GOAL 2: RESTORE IMPROVED PASTURELANDS TO NATIVE GRASSLANDS TO BENEFIT GRASSLAND BIRDS

GOAL 3: MANAGE FOR MIGRATORY/NONMIGRATORY WATERFOWL SPECIES

This example plan only presents 1 of 3 goals. At this point in the plan, other team members would repeat the process outlined in the first goal for the other goals. Team members should follow the same format including headings, etc. Each goal will be discussed separately with final recommendations presented collectively.

SUMMARY, TIMELINE, & BUDGET

The recommendations given under each goal above will involve 4 qualifying management practices: habitat control (prescribed fire, restoration of native grasslands), providing shelter (construction and maintenance of wood duck boxes), and population censusing (annual bird counts). The state requires completion of a minimum of 3 practices with strict guidelines in terms of management intensity for each practice. The implementation of all recommended practices in this plan would have a positive impact on target wildlife species and would exceed minimum requirements for the wildlife tax exemption.

Habitat Control

Habitat control on the Rising Star Ranch will include (1) prescribed fire on 30-acres and (2) the conversion of 10-acre wooded areas to native grasslands. First, we recommend 3 burn units (approximately 30 total acres) be burned each year on a rotational basis. Prescribed fires will be conducted during late fall and early spring (October-March) of each year following guidelines outlined in the plan (Goal 1 Recommendations). Annual prescribed fires will benefit white-tailed deer, northern bobwhites, and other native wildlife species on the Rising Star Ranch.....

Final Recommendations - Summarize your management recommendations for the landowner. Identify all qualifying wildlife management practices (under the guidelines of TPW form, *PWD 885-W7000, Part V*) to be implemented on the property during the coming year(s) that will support and achieve management goals. Include a schedule of events (i.e., time line) outlining all proposed activities and necessary steps to implement your plan. Be sure to refer and include any forms (e.g., TPW Form, *PWD 888-W7000*, annual reporting form, include in Appendix) that need to be filled out. Provide final statement to landowner why your plan should be selected for final implementation.

Final Recommendations - You would continue discussion of the management practices...it would be the most logical to describe management practices by the 7 TPW qualifying practices. The same may apply to the recommendations section if more than 1 practice is recommended for a given goal. It is O.K. to “cross-reference” practices in different goals (e.g., prescribed fire would also benefit grassland birds if that was a goal). In the end, as long as 3 practices have been identified and proposed, the plan would provide the exemption.

Table 2. Estimated annual costs and benefits for the Rising Star Ranch Wildlife Management Plan by management practice, Bellville, Texas, 2004.

Qualifying Practice	Area Treated	Total Cost	Benefit
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<i>Activity</i>	(acres)	(\$)	
Habitat Control			
<i>Prescribed Burning</i>	30	850	-Food/cover for upland game
<i>Native Grassland Conversion</i>	10	2,850	-Food/cover for grassland birds
Providing Shelter			
<i>Wood duck boxes</i>	5	1,200	-Nest sites for wood ducks
Population Censusing			
<i>Spring bird surveys</i>	--	--	-Monitor population trends of birds.
Annual Cost		\$4,900*	

*The majority of the cost is for the one-time purchase of equipment. Landowner may save in contacting a Texas Parks and Wildlife biologist who may provide some of the above equipment for use. Estimated costs after the first-year expected to be \$1,200 annually (Tables 1-XX).

Table 3. Time schedule for proposed management activities by qualifying management practice on the Rising Star Ranch, Bellville, Texas, 2004.

Qualifying Practice <i>Activity</i>	Fall	Winter	Spring	Summer
Habitat Control				
<i>Prescribed Burning – Prepare firelines</i>				XX
<i>Prescribed Burning – Burn units</i>	XX	XX		
<i>Grassland Conversion – Prepare seedbed</i>				XX
<i>Grassland Conversion – Plant seed</i>	XX			
Providing Shelter				
<i>Wood duck boxes – Install</i>	XX			
<i>Wood duck boxes – Clean and repair</i>				XX
Population Censusing				
<i>Spring bird surveys</i>			XX	

Literature Cited

- Bauder, J. 2004. University of Montana. Agronomics of Japanese Millet
<http://www.montana.edu/wwwpb/ag/baudr227.html>
- Dillard, J. 2004. Guidelines for Native Grassland Restoration Projects. Texas Parks and Wildlife Department Private Lands Management Page.
http://www.tpwd.state.tx.us/conservation/publications/media/grassland_restoration.pdf.
- Higginbotham, B. J., and J. C. Kroll. 2004. Supplemental Forage Management for East Texas White-tailed Deer. Wildlife.tamu.edu/publications/A067.PDF.
- Hull, S. D. 2003. Effects of management practices on grassland birds: Eastern Meadowlark. Northern Prairie Wildlife Research Center, Jamestown, ND. Jamestown, ND: Northern Prairie Wildlife

- Research Center Home Page.
<http://www.npwrc.usgs.gov/resource/literatr/grasbird/eame/eame.htm> (Version 12DEC2003).
- Rideout, D., M. Wagner, and K. Brown. 2001. Wildlife Management Activities and Practices: Comprehensive Wildlife Management Planning Guidelines for the Post Oak and Blackland Prairie Ecological Region. Texas Parks and Wildlife Department.
<http://apc.tamu.edu/wfsc406/mgmtplan.htm>.
- S.M. Tracy Herbarium. 2002. Department of Rangeland Ecology and Management. Texas A&M University. <http://www.csdl.tamu.edu/flora/taes/tracy/home.html>
- White, L. D. and C.W. Hanselka. 2003. Prescribed range burning in Texas. Texas Agricultural Extension Service. http://tpwd.state.tx.us/consERVE/media/range_burning.pdf.