# Webless Migratory **Game Bird**



**Strategic** Plan 2011-2015





November 2010

# **Webless Migratory Game Bird**

# **Strategic Plan**

2011 - 2015



Produced by: Texas Parks and Wildlife Department Small Game Program November 2010

Compiled under the direction of the Migratory Game Bird Advisory Committee and the Texas Parks and Wildlife Migratory Game Bird Technical Committee Appreciation is expressed to the following contributors (alphabetically):

**Migratory Game Bird Advisory Committee:** Robert Abbott, Ph.D., Bill Ansell, Kirby Brown, Terry Cooke, Jim Henderson, Rogers Hoyt Jr., Alton Moczygemba, Sammy Nooner, William Osborn III (Chair), Greg Peavy, and James Prince.

**Texas Parks and Wildlife Migratory Game Bird Technical Committee:** Steve Benn, Alan Cain, Gary Calkins, Linda Campbell, Trey Carpenter, David Forrester, Kevin Hartke, Bill Johnson, Kevin Kraai, Shelly Kremer, Mike Krueger, Jared Laing, David Lobpries, Corey Mason, Dave Morrison, Kevin Mote, Matt Nelson, Mike Rezsutek, Ph.D., Calvin Richardson, Chip Ruthven, David Sierra, Major David Sinclair, Jim Sutherlin, Matt Symmank, and Billy Tarrant.

Other Contributors: Brett Collier, Ph.D., Mike Frisbie, Brian Pierce, and Lisa Reitz.



photo by Sammy Nooner

Creative Design: TPWD Wildlife Interpretive Program All photos by TPWD unless noted.

© 2010 TPWD PWD PL W7000-2701 (01/11)

In accordance with Texas State Depository Law, this publication is available at the Texas State Publications Clearinghouse and/or Texas Depository Libraries.

## **Webless Migratory Game Birds**

The term "Webless Migratory Game Birds" (WMGB) refers to all migratory game birds except waterfowl and includes doves, pigeons, sandhill crane, rails, gallinules, snipe and woodcock.

### Status

### **Doves and Pigeons:**

There are seven species of doves and pigeons indigenous to Texas, of which only three (mourning dove, white-winged dove, and white-tipped dove) are currently hunted. Two species (redbilled pigeon and band-tailed pigeon) are currently listed as legal game birds by federal and state regulations but are not hunted in Texas due to limited numbers and distribution. Two other species (Inca dove and common ground-dove) are sparrow-sized birds with no potential for hunting and for which no formal management actions are undertaken.

### **Mourning Dove:**

The mourning dove is the most important game bird in the United States and Texas in terms of numbers of birds harvested and man-days of recreation provided. Texas has approximately 250,000 hunters, roughly 60% of all Central Management Unit hunters (Figure 1). Additionally,

Texas hunters annually harvest approximately 5,000,000 mourning dove, with an average seasonal bag of 20 birds (Figure 2). Southwick and Associates (2005) estimated that dove hunting has an annual economic impact of \$316 million in Texas.



Monitoring, research, and management of mourning dove in Texas has included (1) spring breeding population surveys, (2) fall and winter roadside counts, (3) mail harvest surveys, (4) nesting and production studies, (5) banding and mortality investigations, and (6) harvest regulations. These efforts indicate that the mourning dove population in Texas has fluctuated through time, but overall has generally experienced a downward trend from mid-1960s surveys to date.

### White-winged Dove:

The white-winged dove has long been a favored game bird throughout its range in the southwestern United States, especially in the Lower Rio Grande Valley (LRGV) of Texas where 80%

of the Texas population has historically occurred. Currently statewide, approximately 118,000 hunters spend 460,000 days afield and bag about 1,200,000 white-winged



dove annually. Since the early 1980s, there have been remarkable changes in the density and distribution of white-winged dove. More than 50% of the white-winged dove breeding in Texas now occurs outside of the LRGV, with the greatest densities occurring in the San Antonio area. Breeding populations of white-winged dove now occur as far west and north as Midland, Lubbock, and Dallas/Ft. Worth.

Monitoring, research, and management of white-winged doves in Texas has included (1) spring breeding population surveys, (2) production counts, (3) fall flight surveys, (4) harvest surveys, (5) nesting studies, (6) banding and mortality investigations, (7) harvest regulations, (8) habitat evaluation, acquisition, leases, and development, and (9) deriving aging techniques. These practices have lead to a better understanding of the expanding white-winged dove population and will continue to provide needed information for better management of the species.

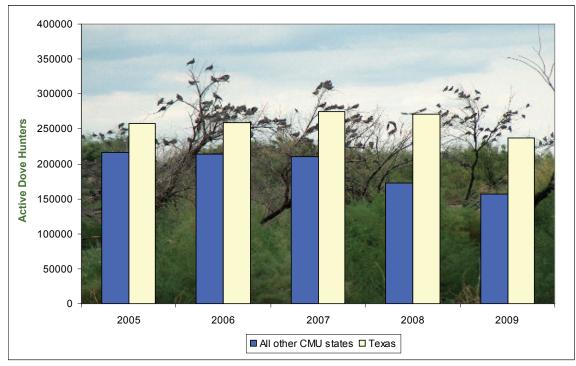


Figure 1. Number of Central Management Unit mourning dove hunters from 2005-09.

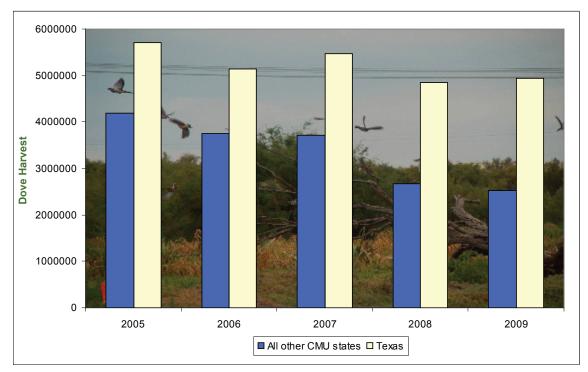


Figure 2. Central Management Unit 2005-09 mourning dove harvest.

### White-tipped Dove:

White-tipped dove have increased in numbers and expanded their range in south Texas since the mid-1970s. A white-tipped dove season was established for the first time in 1984 and approximately 5,000 white-tipped dove are harvested annually.

Monitoring, research, and management of white-tipped dove in Texas has included (1) spring breeding population surveys, (2) nesting studies, (3) production studies, (4) mail harvest surveys.



(5) banding and mortality investigations, and (6) harvest regulations. Although these practices have lead to a better understanding of white-tipped dove life history, this species is still not well understood.

### Sandhill Crane:

Six different subspecies of sandhill crane are

taxonomically recognized. Three of these subspecies winter in Texas. The majority of sandhill cranes that winter in the Texas Panhandle are lesser sandhill cranes. The greater and Canadian sandhill



cranes winter primarily along the middle and lower coastal prairies and inland areas of Texas. Sandhill crane hunting was first permitted in the Texas Panhandle in 1961 and in south Texas in 1983. About 5,000 Texas crane hunters harvest approximately 12,000 cranes annually.

### Rails:

There are six species of rails indigenous to Texas, four of which are considered game birds (king, clapper, sora, and Virginia) and are hunted under current state and federal regulations. The yellow and black rails are sparrow-sized birds and are not hunted. These two secretive species are generally confined to marshes in the upper coast of Texas.

The king and clapper rails are the largest rails and are similar in appearance. These rails are found year round in the marsh-prairie-rice field complexes along the Texas Gulf Coast with the king rail occupying freshwater niches and the clapper rail occupying brackish marsh. The breeding range of the king rail is nearly statewide, while that of the clapper rail is restricted

to the coastal areas. It is assumed that these species experience very little hunting pressure in Texas as state harvest estimates are low.



The sora and Virginia rails

are half as large as king and clapper rails. They also winter in marsh-prairie-rice field complexes along the Texas Gulf Coast. Annual harvest is very low for these species in Texas and there is little potential for these species to become a major contribution to the hunter's bag. Federal harvest surveys estimate a total harvest in Texas of all rails combined at 500 birds annually.



photo by USFWS



### Gallinules:

Two species of gallinule occur in Texas. The purple gallinule breeds and winters in coastal marshes. The moorhen or common gallinule breeds in the eastern half of Texas and winters primarily in coastal marshes. Both species are found in huntable numbers but are not pursued by most hunters. A limited number of hunters will harvest an occasional gallinule while hunting waterfowl. Federal harvest surveys estimate a total harvest of 500 birds annually in Texas.

### Snipe:

Snipe winter throughout Texas and huntable numbers can be found in suitable habitat. Generally hunting of snipe is in association with waterfowl hunting, but it has the potential of providing more recreational sport hunting days. Most hunters are unaware of the quality hunts provided by this species. Federal harvest surveys estimate a total statewide harvest of 5,000 birds annually.

### Woodcock:

The American woodcock, which is considered a very important game bird in many eastern states, reaches the western extent of its range in the Pineywoods of Texas. Limited hunting pressure is exerted on this species by Texas hunters. Total harvest is estimated at 2,000 birds annually.

# **Conservation Need**

The conservation, management, and equitable use of WMGB in Texas requires hunting regulations, habitat management, population monitoring, and research. Hunting regulations must be modified periodically due to population and habitat changes to insure the wise use of these resources. The migratory nature of these species as well as international treaty obligations requires coordination of these regulations between states, the United States Fish and Wildlife Service (USFWS), and foreign governments.

Major land use changes including agricultural, commercial, and urban development have adversely affected some WMGB species in Texas, primarily through the loss of nesting and feeding habitat. Since the vast majority of land in Texas is in private ownership, private land management directed at WMGB is crucial in offsetting the detrimental effects of land use changes. TPWD must continue to provide technical guidance to landowners regarding habitat management. Additionally, assistance with cost-share programs should remain a high priority for habitat conservation and restoration.



# **Strategic Plan**

The purpose of this plan is to provide prioritized direction for management, funding, research, and staff time. More specifically, this plan is intended to prioritize the expenditure of migratory stamp funds and provide direction on management of these species. The goals of this plan tie directly to TPWD's 2010 Land and Water Resources Conservation and Recreation Plan and the Wildlife Division Strategic Plan (WDSP).

The Wildlife Division mission statement and strategic plan goals are as follows:

### Wildlife Division Mission Statement:

To foster on-the-ground conservation of diverse native wildlife and their habitats through sound science and land stewardship for the benefit of the resource and our hunting and outdoor heritage.

### Wildlife Division Strategic Plan Goals:

- 1. Foster on-the-ground conservation of diverse native wildlife and their habitats utilizing sound science.
- 2. Foster land stewardship for the benefit of the resource and the people of Texas.
- 3. Promote the hunting heritage of Texas and associated outdoor recreation.
- 4. Ensure use of efficient business practices to achieve our mission.

The Small Game Program, in cooperation with all four Wildlife Division regions, the Private Lands and Public Hunting Program, the Wildlife Diversity Program, and Technical Programs is charged with the management of WMGB. The diversity of these birds, from wetland dependent species such as gallinules, rails, and snipe, to upland birds such as mourning and white-winged dove, creates challenges in producing one document that adequately addresses all of the species needs. However, national and/or management unit plans exist for all of these species. Furthermore, national documents identifying priority information needs for mourning and whitewinged dove, sandhill crane, rails and snipe, gallinules, and American woodcock have been developed (see Appendix). Since an American Conservation Plan exists for woodcock and the wetland dependent species are served by habitat management actions recommended



in the Waterfowl Strategic Plan, the majority of this plan will focus on dove and sandhill crane management and needs. This plan incorporates the goals, objectives, actions, and priorities outlined in the following documents:

- Mourning Dove National Strategic Harvest Management Plan 2003
- Priority Information Needs for Mourning and White-winged Dove 2008
- · Priority Information Needs for Sandhill Cranes 2009
- Priority Information Needs for Rails and Snipe 2009
- · Priority Information Needs for Coots, Gallinules, and Moorhens 2010
- American Woodcock Conservation Plan 2008
- Priority Information Needs for American Woodcock 2010
- Priority Information Needs for Ban-tailed Pigeon, Zenaida Dove, White-tipped Dove, and Scaly-napped Dove – In Progress

### Webless Migratory Game Bird Program Goals:

- 1. Promote the hunting heritage of WMGB. (WDSP Goal 3)
- 2. Maintain habitats to support populations at levels consistent with species management plans and harvest strategies. (WDSP Goals 1 and 2)
- 3. Increase public awareness of migratory game birds, their habitats, and regulatory requirements for management. (WDSP Goals 1, 2, and 3)



### Goal 1: Promote the hunting heritage of WMGB.

**Objective 1:** By 2016, increase the number of mourning dove hunters by 10% when compared to the 2008-2010 three year average.

Strategy 1: Work with regions and the Public Hunting Program to increase the available acreage of lands for public hunting by maximizing the use of all state and leased lands.

Action 1: Work to open land for public hunting owned/managed by State Parks Division, General Land Office, universities, and Texas Department of Criminal Justice.

Action 2: Explore corporate partnerships for lease or acquisition of dove fields.

Action 3: Prioritize public lease acreage with special consideration given to leases near urban areas, especially along the I-35 corridor.

Strategy 2: Ensure annual representation of Texas hunters at state and federal meetings by assuring that TPWD maintains a leading role both in the Central Flyway and at the national level regarding regulations and species planning.

Action 1: Send relevant staff to all flyway, task force, and working group meetings to ensure that Texas maintains an active role in the regulations process.

Action 2: Send at least two representatives annually to the dove wingbee to maintain an active role in the harvest survey process.

Action 3: Work to ensure that funding and out-of-state travel restrictions do not impede the ability to attend the necessary meetings.

**Objective 2:** Conduct at least 95% of the annual national surveys and monitoring programs to maintain high quality data important for establishing regulatory frameworks.

Strategy 1: Work with regional, district, and project leadership to ensure continued support for national surveys and monitoring programs by ensuring that the needed amount of staff time is allocated to these programs.

Action 1: Provide annual training to staff and volunteers to ensure they are adequately prepared to assist with surveys and monitoring.

Action 2: Attend regional, district, and project meetings to provide information on the need and relevance of surveys and banding.

Action 3: Provide Regional Directors, District Leaders, and Project Leaders staff time requirements for annual surveys in advance to ensure that workloads can be appropriately planned and balanced based on WDSP priorities.



Strategy 2: Enhance our ability to monitor populations of WMGB by developing survey methodologies through science-based research.

Action 1: Continue to develop and refine DISTANCE sampling for doves in rural and urban areas across the state.

Action 2: Publish manuscript on DISTANCE sampling results.

Action 3: Develop protocol for combining existing call count survey and urban routes into a single dove survey that samples all doves across all habitats.

Action 4: Provide survey and training protocols to the USFWS and other states to encourage them to examine the applicability of incorporating DISTANCE sampling at the national level.

Action 5: Continue to work with universities and other states to develop white-winged dove aging techniques that can be used on hunter harvested dove.

Action 6: Work towards integrating white-winged dove in the national parts collection survey.

Action 7: Investigate the potential and feasibility for integration of the National Marshbird Monitoring Program into TPWD's annual monitoring efforts.



# Goal 2: Maintain habitats to support populations at levels consistent with species management plans and harvest strategies.

**Objective 1:** By 2016, 50% of all landowners with active management plans will be implementing 75% of the recommended practices. (WDSP)

Strategy 1: Increase capacity within TPWD by providing information and training to field and program staff that will enable them to better assist landowners with habitat management for WMGB species.

Action 1: Provide workshops to update staff on relevant research, habitat management, and potential funding opportunities.

Action 2: Assist staff with landowner field days.

Action 3: Provide financial assistance to help with educational materials.

**Objective 2:** Annually allocate 35% of Migratory Game Bird Stamp fund revenue for habitat improvement on Wildlife Management Areas (WMAs) and private land.

Strategy 1: Enhance WMGB habitat management on public lands by allocating funds for habitat work and equipment on WMAs.

Action 1: Provide funds to purchase needed equipment for habitat work.

Action 2: Provide funds to contract needed habitat work.

Strategy 2: Improve TPWD's ability to assist private landowners by providing funds for habitat work when landowners or other non-governmental organization (NGO) partners can provide at least 25% match.

Action 1: Purchase supplies and equipment to facilitate habitat restoration by cooperators.

Action 2: Facilitate cost-sharing and other benefits to participating landowners.



Strategy 3: Utilize Migratory Game Bird Stamp funds for acquisition and/or long-term leases of native grasslands or lands that can easily be converted to native habitat, especially near urban areas.

Action 1: Purchase or lease lands in strategic areas across the state that will be used for public hunting and habitat conservation.

Action 2: Explore opportunities for corporate partnerships for land lease or purchase.

**Objective 3:** Annually allocate 5% of Migratory Game Bird Stamp funds for needed WMGB research and management.

Strategy 1: Ensure TPWD's ability to manage WMGB by making funds consistently available to address research needs.

Action 1: Annually address prioritized information deficiencies through TPWD's Migratory Game Bird Technical Committee.

**Objective 4:** By 2016, identify and prioritize key focus areas for conservation of WMGB.

Strategy 1: Maintain and develop partnerships to identify key areas for strategic conservation delivery efforts by TPWD, NGO partners, and private landowners.

Action 1: Work with existing Joint Ventures and NGO partners to identify areas for potential lease and acquisition.

Action 2: Work with other southwestern states and USFWS to address white-winged dove conservation and management needs.

# Goal 3: Increase awareness of migratory game birds, their habitat, and regulatory requirements for management.

**Objective 1:** By 2016, conduct five workshops for Wildlife, Law Enforcement, and/or Hunter Education staff on current and future conservation needs.

Strategy 1: Provide information to TPWD staff on lead (Pb) related research findings and other relevant subjects through trainings and/or publications.

Action 1: Attend regional and district Wildlife and Law Enforcement Division meetings to provide a briefing on lethality study findings.

Action 2: Explore opportunities for training at the Game Warden Academy to present research findings and answer questions.

Action 3: Meet with Hunter Education Program staff to present findings of studies and discuss ways to integrate findings into their training curriculums.

Action 4: Conduct wounding loss and shotgun proficiency workshops for staff.

**Objective 2:** By 2013, conduct three public meetings and produce two popular articles for the general public on current and future conservation needs.

Strategy 1: Provide information on lead (Pb) research findings, the regulation process, and other relevant issues by hosting public meetings and producing articles in popular magazines.

Action 1: Schedule public meetings in Dallas, San Antonio, and Midland to present research findings and answer questions.

Action 2: Produce a popular article on lethality study findings for a hunting related magazine.

Action 3: Produce a popular article for an outdoor related magazine on the migratory game bird regulations process and detail the role of states.



## Research

The Migratory Game Bird Technical Committee derived a prioritized list of research to address management and conservation needs at the state and national levels.

### **Research Needs:**

- 1. Development of a hunter harvested white-winged dove aging technique.
- 2. Evaluation of the South Zone and Special White-winged Dove Area to assess potential to expand white-winged dove hunting opportunities.
- 3. Assessment of the ability to implement the National Marshbird Monitoring Program.
- 4. Evaluate the behavioral responses of sandhill cranes to wind energy infrastructure.
- 5. Evaluate the distribution and abundance of rails in Texas.

### **Appendix**

### Mourning Dove National Strategic Harvest Management Plan

# http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/Mourning%20Dove%20National%20Strate-gic%20Harvest%20Management%20PlanSm.pdf

This document provides a long range vision for improving mourning dove management through the development of predictive harvest strategies. The purposes of this plan are to: (1) promote the concept of coordinated management of mourning doves to insure uniformity of regulatory action and equitable conservation across the species range in the three Mourning Dove Management Units; (2) acknowledge the need to recognize demographic differences among management units; and, (3) acknowledge that the current harvest management system, and the knowledge base supporting it, needs improvement. Future recommendations will be made regarding management unit-specific harvest strategies and initiation of new, long-term monitoring efforts.

### Priority Information Needs for Mourning and White-winged Dove

# http://www.fws.gov/migratorybirds/NewReportsPublications/Research/WMGBMR/dove%20priorities%20strategy%20 djcase%20FINAL%2006-30-08.pdf

This document contains recommendations for obtaining priority information needed to reduce the uncertainties underlying management decisions for two of the most important game birds in North America, mourning and white-winged doves. This strategy is intended to increase the financial support for management over the next five to 10 years with thoughtful and deliberate planning built on basic scientific principles.

### Priority Information Needs for Sandhill Cranes

### http://www.fws.gov/migratorybirds/NewReportsPublications/Research/WMGBMR/Priority\_Information\_Needs\_for\_ Sandhill\_Cranes\_10-09-09\_FINAL.pdf

This document contains recommendations for obtaining priority information needed to improve management decisions for migratory populations of sandhill cranes, focusing on initiating or enhancing monitoring efforts and estimating vital rates during the annual cycle of these birds. The strategy is intended to increase financial support for management and research activities over the next 5 to 10 years with thoughtful and deliberate planning built on basic scientific principles.

### Priority Information Needs for Rails and Snipe

# http://www.fws.gov/migratorybirds/NewReportsPublications/Research/WMGBMR/Priority\_Information\_Needs\_for\_Rails\_and\_Snipe.pdf

This document contains recommendations for obtaining priority information needed to reduce the uncertainties underlying management decisions for rails and snipe. This strategy is intended to increase the financial support for management over the next five to ten years with thoughtful and deliberate planning built on scientific principles.

### Priority Information Needs for American Coots, Purple Gallinules, and Common Moorhens

### http://www.fws.gov/migratorybirds/NewReportsPublications/Research/WMGBMR/Priority\_Information\_Needs\_for\_ American\_Coots\_Purple\_Gallinules\_Common\_Moorhens\_FINAL.pdf

This document contains recommendations for obtaining priority information needed to improve habitat and harvest management decisions for migratory populations of American coot, purple gallinule, and common moorhen by focusing on evaluating and improving knowledge of monitoring efforts, vital rates (survival, reproduction, and recruitment) and habitat needs during the annual life cycle of these birds. The strategy is intended to increase financial support for management and research during the next 5 to 10 years with thoughtful and deliberate planning based on scientific principles.

# American Woodcock Conservation Plan: a summary of and recommendations for woodcock conservation in North America

#### http://www.timberdoodle.org/sites/default/files/woodcockPlan\_0.pdf

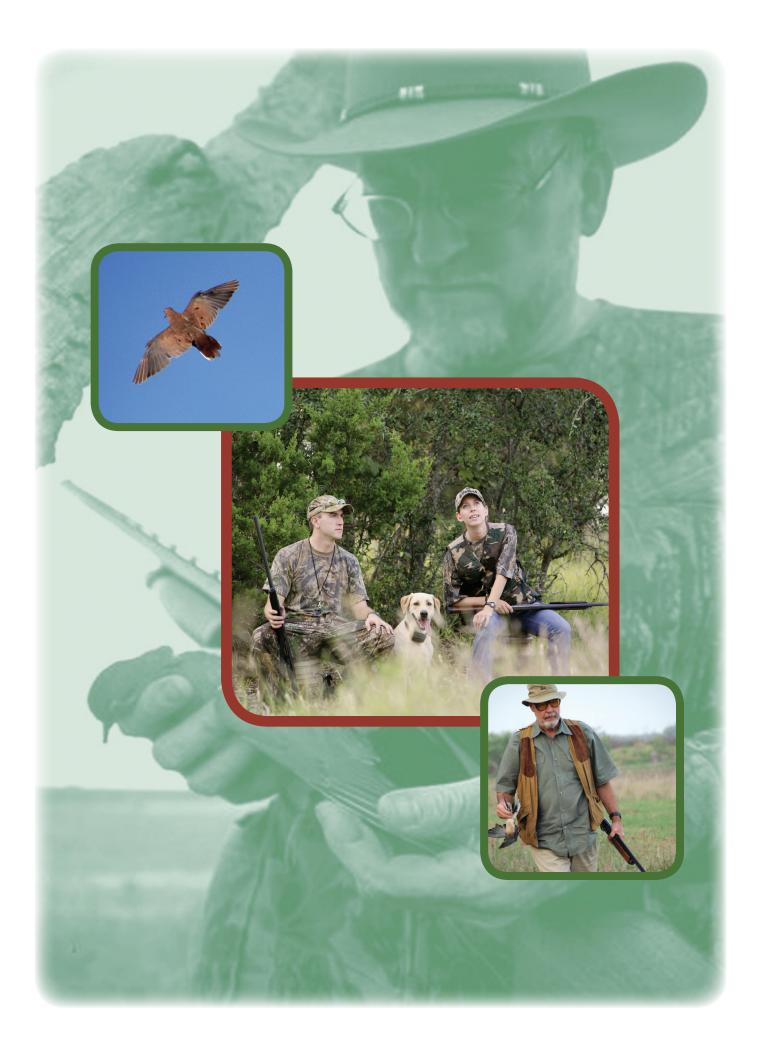
This document describes the changes in woodcock densities and habitat that have occurred from the early 1970s to present. A summary of recommendations for conservation by region is provided with specific population densities and habitat acreage goals.

#### Priority Information Needs for American Woodcock

#### http://www.fws.gov/migratorybirds/NewReportsPublications/Research/WMGBMR/Priority\_Information\_Needs\_for\_ American\_Woodcock\_3-15-10.pdf

This document contains recommendations for obtaining priority information needed to improve habitat and harvest management decisions for migratory populations of American woodcock, focusing on evaluating and improving knowledge of monitoring efforts, vital rates (survival, reproduction, and recruitment), and habitat needs during the annual cycle of these birds. The strategy is intended to increase financial support for management and research activities over the next 5 to 10 years with thoughtful and deliberate planning built on basic scientific principles.







4200 Smith School Road Austin, Texas 78744 www.tpwd.state.tx.us

TPWD receives federal assistance from the U.S. Fish and Wildlife Service and other federal agencies and is subject to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and state anti-discrimination laws which prohibit discrimination the basis of race, color, national origin, age, sex or disability. If you believe that you have been discriminated against in any TPWD program, activity or facility, or need more information, please contact Civil Rights Coordinator for Public Access, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.