



THE MOIST-SOIL MANAGER

Vol. 1 No. 2

A Publication of the Mississippi River Trust

Waterfowl Numbers Increase

Duck hunters will find plenty to cheer about in the annual Waterfowl Breeding Population and Habitat Survey released by the U.S. Fish and Wildlife Service.

The fourth highest Canadian pond count on record propelled the breeding populations of three duck species—northern shovelers, redheads and canvasbacks—to all-time highs and pushed the green-winged teal population to its second highest level on record. Blue-winged teal took advantage of improved water conditions on both sides of the border to achieve their third highest breeding population ever.

The total duck breeding population

climbed 14 percent to 41 million birds and mallards rose 10 percent to over 8 million. May ponds across the surveyed area were at 7 million, a 15 percent increase from 2006 and 44 percent higher than the long-term average.

Of the other surveyed species, gadwall rose 19 percent to 3.4 million breeding birds, wigeon jumped 29 percent to 2.8 million, green-winged teal rose 13 percent to 2.9 million, blue-winged teal were up 14 percent at 6.7 million, shovelers rose 24 percent to 4.5 million, redheads climbed 10 percent to just over 1 million, scaup bounced 6 percent from last year's record low to 3.5 million and canvasbacks jumped by a surprising 25 percent to 865,000.

Credit goes to the excellent water conditions in Canada for the record redhead and canvasback numbers and near-record for green-wings.

About the only bad news

in the breeding survey was the pintail, which dipped to 3.3 million.

In many areas of the breeding grounds, heavy rains continued into June and July, which is quite unusual. When small wetlands are abundant, hens are more likely to re-nest and brood survival increases dramatically.

Despite all the good news, hunters should temper their expectations about the prospects for the waterfowl season, at least as far as mallards and pintails are concerned. A lot of it will depend on the amount of rainfall in wintering areas and the climate to our north.

Historically, most of the continent's ducks originated in Canada, but thanks to the Farm Bill, the Clean Water Act, the duck stamp and the efforts of the Migratory Bird Conservation Commission, a significant percentage of today's ducks originate in the United States. It's important that we hang onto the programs responsible for producing those birds.



The overall duck population is up according to the Waterfowl Breeding Population and Habitat Survey.



In Arkansas:

Steven Stake
211 North Rand Street
P.O. Box 8129
Searcy, AR 72145
Office: (501) 305-3160
Fax: (501) 305-3302
Cell: (501) 593-8115
E-mail:
sstake@mississippirivertrust.org

In Louisiana:

Ryan Starks
1521 Elizabeth Street
P.O. Box 1441
West Monroe, LA 71291
Office: (318) 324-8503
Fax: (318) 397-2326
Cell: (318) 557-8170
E-mail:
rstarks@mississippirivertrust.org

In Mississippi:

Brian Ballinger
384 Stoneville Road
Building 101, Suite 300
P.O. Box 15
Stoneville, MS 38776
Office: (662) 686-3375
Fax: (662) 686-4780
Cell: (662) 820-9774
E-mail:
bballinger@wildlifemiss.org

For complete articles and more information regarding moist-soil management techniques and topics please visit www.wildlifemiss.org or www.mississippirivertrust.org.

The Mississippi River Trust, a charitable, 501(c)(3) organization, works only with private, willing landowners to find ways to preserve the Mississippi River watershed's rich history, prairies, red clay hills, bottomlands and bayous, coastal savannas, longleaf pine forests and scenic rivers and streams.

Project Connects Fragmented Bottomland Forest

By Creston Shrum
Arkansas, NRCS

The Natural Resources Conservation Service (NRCS), through the Wetlands Reserve Program (WRP), is partnering with The Nature Conservancy and the Mississippi River Trust to restore thousands of acres in the Big Woods of Arkansas – a 550,000-acre corridor of floodplain forest along the Mississippi River.

Of the 550,000 acres of bottomland forest still standing, about 300,000 acres are contiguous. The remainder exists as islands among agricultural fields – less than 10 percent of Arkansas' original 8 million acres of forested wetlands remain.

A 404-acre WRP project in Woodruff County is designed to tie some of the fragmented areas together by converting the agricultural fields back to wetlands.

"This practice is a win-win situation for everyone involved – especially for the wildlife that inhabit these areas," said Jerry Hogan, a Field Representative for The Nature Conservancy.

"We have installed four levees and planted approximately 70,000 trees," said David Fowlkes, Conservation Agronomist at the Jonesboro Technical Service Center.

"By incorporating five water control structures into the plan, we can control the water level with flashboard risers to flood fields for waterfowl and shorebirds," Fowlkes said. "By dropping the water slowly we can create several ages of forage for the birds."

Shallow water areas with mounds also provide semi-permanent to permanent water on the site for a variety of birds, amphibians and other animals.

"Our goal with each WRP project is to return the land to its natural state," Fowlkes said.

To accomplish this, a mixture of bottomland hardwood species was planted to provide cover and a food source for the wildlife.

The NRCS, The Nature Conservancy and the Mississippi River Trust are working on five other WRP projects in the Big Woods area to restore nearly 6,000 acres.



PHOTO BY CRESTON SHRUM

David Fowlkes inserts boards into a water control structure.

The Mallard: *A Popular Species*

The mallard (*Anas platyrhynchos*) is the most numerous and widely distributed duck in North America, and the most sought after species of waterfowl across most of its range.

The mallard utilizes a vast breeding range, larger than that of any other duck in North America. Early February will find these earliest of northern migrants leaving their wintering grounds in the South. Mallards begin reaching their breeding grounds as open water becomes available. While the species is highly dependant upon water conditions in the famous “prairie pothole” region for breeding success, mallards will, by April and May, be found from the northern United States to the shores of the Bering Sea.

As numbers of birds increase on the larger water areas of the breeding grounds, pairs will begin to disperse to potholes and other small water areas. The bonding process may have begun as early as the preceding August, with the vast majority having been firmly established by January. Within a few days of selecting a particular area for resting and feeding, the pair will conduct low, evening scouting flights to find a suitable nest site.

Types of nesting cover are as varied as the habitats across the range in which mallards breed. While dense upland cover is preferred, mallards have been found to utilize hay and crop fields, areas of bulrush or cattail marsh, hollow tree trunks or tree crotches, fallen limbs and logs and grass-lined artificial nesting structures of various types. When a site is selected, the hen forms a nest bowl or scrape in old plant litter or moist earth. The area is usually 7 to 8 inches in diameter and 1 to 2 inches deep. The hen lays one egg per day and adds down and vegetation fragments to the nest until the clutch is complete. At this time she will pluck a large amount of down from her breast with which to ring the nest and cover the eggs in her absence. Mallards lay an average of nine eggs per clutch, and incubation lasts around 26 to 30 days.

A myriad of factors can affect nesting success or failure. Ample amounts of suitable nesting habitat along with favorable water conditions in the breeding area are vital in promoting nest success. Studies have shown nesting success to vary from 13 to 75 percent across the breeding range. In cases of nest failure, predation appears to be a major contributor. Skunks, raccoons, red fox, crows and magpies are all principal destroyers of nests. Other activities such as livestock grazing (trampling of nests), plowing,

flooding, burning and mowing can be factors in nest destruction.

Adult drake mallards, or “greenheads” as they are aptly named, have a glossy green head, a yellow bill and a white neck-ring. The sides are gray, with the back being darker in color. The tail consists of a white section sandwiched between two black sections. The wing speculum of the drake is an iridescent violet-blue which is bordered by a pronounced white stripe at the front and back. The legs and feet of adult males are a bright coral-red color.

The hen mallard, or “susie,” has a much more subdued plumage than the drake. She is mottled brown in color, usually being darker on the upper body and lighter on the lower body. The bill is usually orange in color and the legs and feet are a dull orange.

The mallard is the most vocal of all commonly hunted waterfowl species. Though drakes are rather quiet, the hen has a variety of quacks that set the standard for comparison with other species, and for hunters attempting to call ducks.

In flight, the broad wings and a short tail create the impression that the wings are set far back on the body. The wing beat is slower than that of any other duck. Flocks are usually well formed and tend to be larger than those of other ducks, sometimes containing several hundred birds.

Mallards are members of a group of waterfowl referred to as “dabbling ducks” or “puddle ducks.” Some other examples of this group include pintails, gadwall, widgeon and teal. These birds share the ability to take off from the water in a near vertical fashion, with no need for the running start used by some species of ducks. As the group name implies, these birds prefer to feed by “dabbling” or tipping up in shallow water areas. In fact, mallards and other puddle ducks prefer to

feed in water depths of 10 inches or less.

Mallards are highly adaptable feeders and will readily supplement their normal diet with the waste grains found in agricultural fields throughout their range. Crops used by mallards include corn, rice, soybeans, sorghum, wheat, barley, oats and peas. Where found in close proximity, corn and/or rice are nearly always selected over soybeans. These crops are particularly important during periods of severe cold, especially if found in stubble fields when areas of natural foods have become covered with ice. At most other times, however, studies have shown that mallards prefer to feed upon the seeds, browse and tubers of flooded native vegetation.

Natural foods utilized by the mallard are again as varied as the places in which the bird is found. While by no means inclusive, a list of vegetation selected by mallards would include wild millets (barnyardgrass), annual smartweeds, both perennial and annual flatsedges, acorns, buttonbush, bidens, bulrush, spikerush, sprangletop, panic grasses, rice cutgrass, dock and duck potato. Also important in meeting the seasonal nutritional demands of egg production and molt are invertebrates such as snails, crustaceans and insects.

The beautiful, widespread and highly-prized mallard is a species truly worthy of our best management efforts. Much is made of breeding ground conditions and flight numbers headed south each fall. As southern managers, we play an equally important part in the annual cycle by sending a healthy breeding population back north each spring. Good moist-soil management is part of this formula.

This article was written by Rob Ballinger and Brian Ballinger, field biologists with the Mississippi River Trust.



The mallard is one of the most sought-after species of waterfowl in the Lower Mississippi River Valley.

Unique Arkansas projects increase wetland acreage

By Creston Shrum, *Arkansas, NRCS*

In the early 1800s, approximately 9.8 million acres in Arkansas were wetlands and bottomland hardwood forests. By the mid-1980s, only 2.8 millions acres existed – a 72 percent loss.

But thanks to programs like the Wetlands Reserve Program (WRP), Arkansas is regaining wetland acres throughout the state. Arkansas is second in the nation in WRP with 190,401 acres enrolled.

NRCS has wetland projects in 40 counties in each region of the state.

In southwest Arkansas about 30,000 acres have been restored in the area surrounding the Red River. Wetlands work in southeast Arkansas is playing an

important role in reducing soil erosion and improving water quality. The northeast region, working in conjunction with the Fish and Wildlife Service, is reestablishing the bottomland hardwood forest that once covered the area. And, in northwest Arkansas, WRP is being used as a tool to address farm nutrient run off issues that have developed over the past decade.

All of these accomplishments are in addition to providing habitat for migratory birds and other native wildlife.

Currently, the largest project NRCS is working on is in Pulaski County, covering 11,281 acres owned by 18 landowners. The site is directly across the Arkansas River from a 7,196-acre project with 12 landowners completed in 2005.

“Once completed, the work will create a four-mile long riparian area on both sides of the Arkansas River,” said Kalven L. Trice, Arkansas state conservationist.

“I am proud of the work NRCS employees do with partners such as Ducks Unlimited, Audubon Arkansas, the Central Arkansas Resource Conservation and Development Council, the Nature Conservancy, the Mississippi River Trust and landowners,” Trice said.



FUNDED ACRES 1994 – MARCH 2007

Permanent	345 easements, 172,389 acres
30 year	65 easements, 17,201 acres
10 year	10 agreements, 811 acres
TOTAL	421 easements, 190,401 acres

3,926 acres of wetlands are under permanent easement through the Emergency Watershed Program/Floodplain.

UNFUNDED ACRES AS OF MARCH 2007: 52,819

Louisiana leads nation in total acres enrolled in WRP

Courtesy Louisiana NRCS

Through the Wetlands Reserve Program (WRP), NRCS and private landowners are restoring marginal bottomland hardwood forested wetlands in Louisiana. Louisiana NRCS, in cooperation with participating landowners and partners, is focusing on restoring the former hydrology and native plant communities on all WRP conservation easements.

Louisiana continues to lead the nation in the total number of acres enrolled in WRP with 218,687 acres. Statewide, Louisiana has more than 550 perpetual easements on 202,387 acres; thirty-nine 30-year easements on 13,948 acres and sixteen 10-year agreements for 2,352 acres.

In May 2005, NRCS, along with landowners and partners from throughout the state, celebrated 200,000 acres of land enrolled in the WRP in Louisiana. “The 200,000-acre celebration was a tremendous milestone for Louisiana,” said Don Gohmert, the former Louisiana state conservationist. “This was a community effort, a true partnership with many organizations, agencies and individuals coming together to add value and quality to the program. It is cooperative conservation to the maximum extent involving landowners and many partners.”

In August 2005, Louisiana NRCS joined the U.S. Fish and Wildlife Service, Ducks Unlimited, and the Black Bear Conservation Committee

in cooperation with private landowners and soil and water conservation districts to make a presentation at the White House Conference on Cooperative Conservation, the fourth such conference in American history.

The presentation, “Wetlands, Birds and Bears ... A Louisiana Happening” focused on the WRP Black Bear Corridor Special Project that targets the easement acquisition and restoration of over 56,000 acres in Louisiana.

The project, along with other work in the state, will help provide uninterrupted habitat for wildlife, neotropical songbirds and waterfowl during spring and fall migrations.

FUNDED ACRES 1992 – MARCH 2007

Permanent	550 easements, 202,387 acres
30 year	39 easements, 13,948 acres
10 year	16 agreements, 2,352 acres
TOTAL	605 easements, 218,687 acres

7,715 acres of wetlands are under permanent easement through the Emergency Watershed Program/Floodplain.

UNFUNDED ACRES AS OF MARCH 2007: 5,241

Featured Moist-soil Plant



In the previous issue, we discussed a plant (toothcup) that wetland managers should seek to promote in their moist-soil areas because of the benefits it provides to visiting waterfowl. Proper management can result in the establishment and production of many such valuable, naturally occurring plants. In taking the bad with the good, however, managers will also occasionally have to deal with plants

that fall at the opposite end of the desirability scale. Today, we'll look at one such plant.

Sesbania (*aka* coffeeweed) is a plant which is, unfortunately, all too familiar in many moist-soil situations. Depending upon frequency and coverage, its presence can represent anything from a minor nuisance to (more often) a serious obstacle in a successful moist-soil program.

SESBANIA, HEMP SESBANIA, COFFEEWEED (*Sesbania macrocarpa*)

Sesbania is a legume that typically grows to a height of 10 feet. It prefers wet, highly disturbed habitats and sandy sites. Optimum germination occurs later in the growing season when mudflats are exposed during periods of elevated temperatures. Although germination is late (best following late spring or summer drawdown), sesbania sometimes forms dense stands that preclude germination and growth of desirable moist-soil species. Longevity of seeds is great and sporadic occurrences are common, particularly following disturbance.

PLANT VALUE:

Produces large amounts of seed but value for waterfowl is poorly documented. Use of sesbania stands by green-winged teal has been recorded in the southeast, but it is undetermined whether use is related to seeds or invertebrates. Dense, robust stands tend to be avoided by waterfowl.

CONTROL:

Problem: 5 percent cover

Severe Problem: 10 percent cover

CONTROL STRATEGIES:

Control of sesbania is best accomplished by creating conditions favorable for the germination of beneficial plants early in the growing season. Once established, beneficial plants can outcompete newly germinated sesbania. Therefore, control strategies should be performed early in the growing season. If early control is not possible, late disk flood often prevents re-establishment of sesbania and creates conditions favorable for fall migrating shorebirds. This can be followed by an early drawdown during the subsequent growing season.

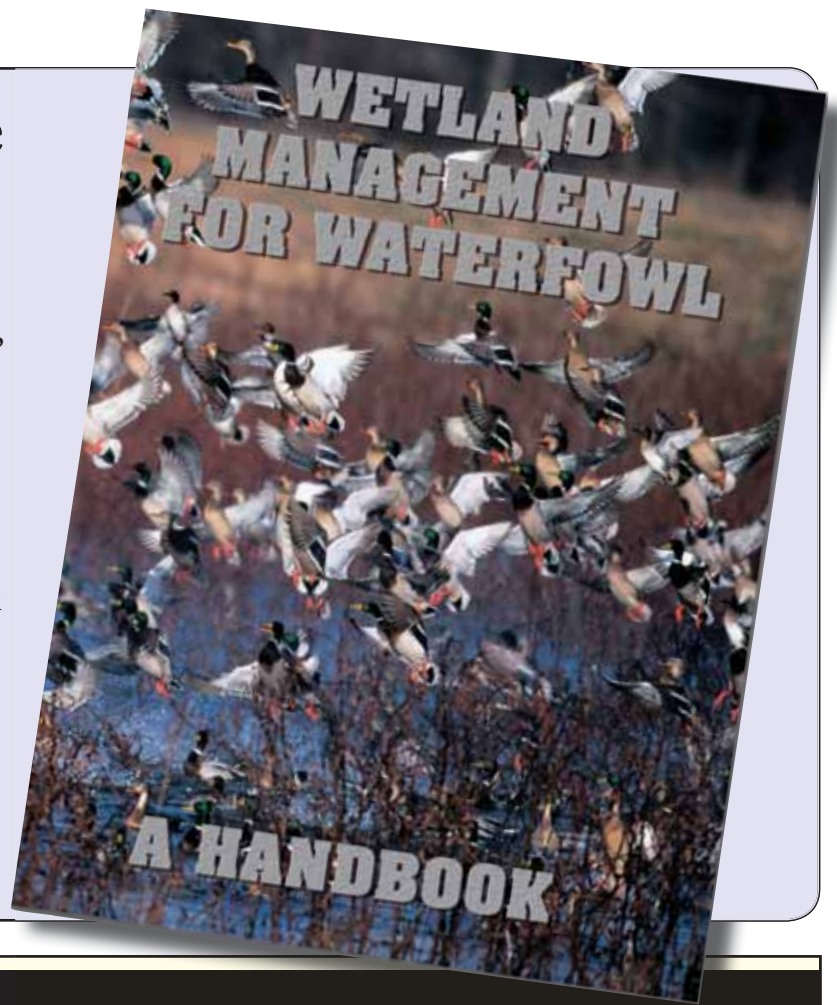


To view an expanded article which discusses both sesbania and toothcup, and to see additional coverage of management related topics, please go to www.mississippirivertrust.org.

This plant profile was provided by Natural Resources Conservation Service Wildlife Biologist Kevin Nelms.

Handbooks Available

In October of 2007, the Mississippi River Trust, in conjunction with the Natural Resources Conservation Service, published a second edition of the handbook, *Wetland Management for Waterfowl*. Landowners enrolled in the Wetlands Reserve Program were mailed a copy of this handbook. The handbook is free to anyone requesting a copy. However, \$5.00 per copy is required to cover postage and handling. Please contact the Mississippi River Trust at (662) 686-3375 to obtain your copy.



Meet the Staff...



"I am a passionate outdoorsman who loves to improve wildlife habitat in any way that I can. I enjoy working with landowners and agencies that are also passionate about improving wildlife and their habitat for future generations."

Ryan Starks

• FOCUS AREA: LOUISIANA

- Received Bachelor of Science degree in Wildlife Conservation from Louisiana Tech University in Ruston, Louisiana.
- Graduate of Silliman High School in Clinton, Louisiana.
- Member of Delta Waterfowl, Ducks Unlimited and The Wildlife Society.
- Professional interests include working with private landowners, federal agencies, and other non-governmental organizations to conserve wildlife habitat, primarily on wetlands.
- Personal interests include spending time with friends, family and my wife, Hollie, hunting, fishing, cooking and carpentry.

Next Issue: Steven Stake, Arkansas



PO Box 15
Stoneville, MS 38776

NONPROFIT ORG
U.S. POSTAGE
PAID
JACKSON, MS
PERMIT NO. 281

Future Newsletters

Future editions of this newsletter will only be available electronically. The current copy, as well as future editions, can be viewed at www.mississippirivertrust.org.

However, if you are a WRP landowner and would like to receive the newsletter via e-mail, please take a moment to fill out the form below and return it to Moist-soil Newsletter, Mississippi River Trust, P.O. Box 15, Stoneville, Mississippi, 38776.

PLEASE PRINT:

Landowner/Manager

Name _____

Address _____

City _____ State _____ Zip _____

Telephone _____ E-mail _____

WRP Tract Name as Listed with NRCS (*i.e.*, *Club Quacker*, *Honker Haven Inc*, *Joe's Timber LLC*, *etc.*)

Tract Location (State) _____ (County/Parish) _____