

## Project connects fragmented bottomland forest

The Natural Resources Conservation Service (NRCS) through the Wetlands Reserve Program is partnering with The Nature Conservancy 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



**David Fowlkes inserts boards into a water control structure.**

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

## Bringing nature home

### *WRP helps turn 22,000 acres into wildlife paradise*

Dana Horn started with just 363 acres enrolled in the Wetlands Reserve Program in 1997, and since then has added to it for a total of approximately 17,000 acres in WRP and 120 acres in the Conservation Reserve Program (CRP).

This land benefits more than ducks and it is all thanks to Horn keeping the big picture and long-term plan in mind.

Horn has a superior grasp on what is important for wildlife and his farm in Miller County. "Water is king," he says. "It is precious and is getting more so." Ample water is available from rivers, lakes and wells on the property to irrigate both crop land and WRP moist soil units. The largest pump can move 12,000 gallons of water per minute.

NRCS Resource Engineer, Randy Childress, designed the plans to utilize the irrigation canals already on the farm. Working with the on-site manager Brendon Burrell, Childress and Horn are restoring micro-typography potholes and habitat mounds in the WRP sites and monitoring the 902,000 trees planted.

The value for wildlife is enhanced by the cypress swamps, hardwood timber and farm fields. The complete mosaic is a paradise for wildlife. Deer, otters, alligators, bobcats, waterfowl, and songbirds all call the farm home.

"The CRP buffer parallel to the creek acts like a corridor

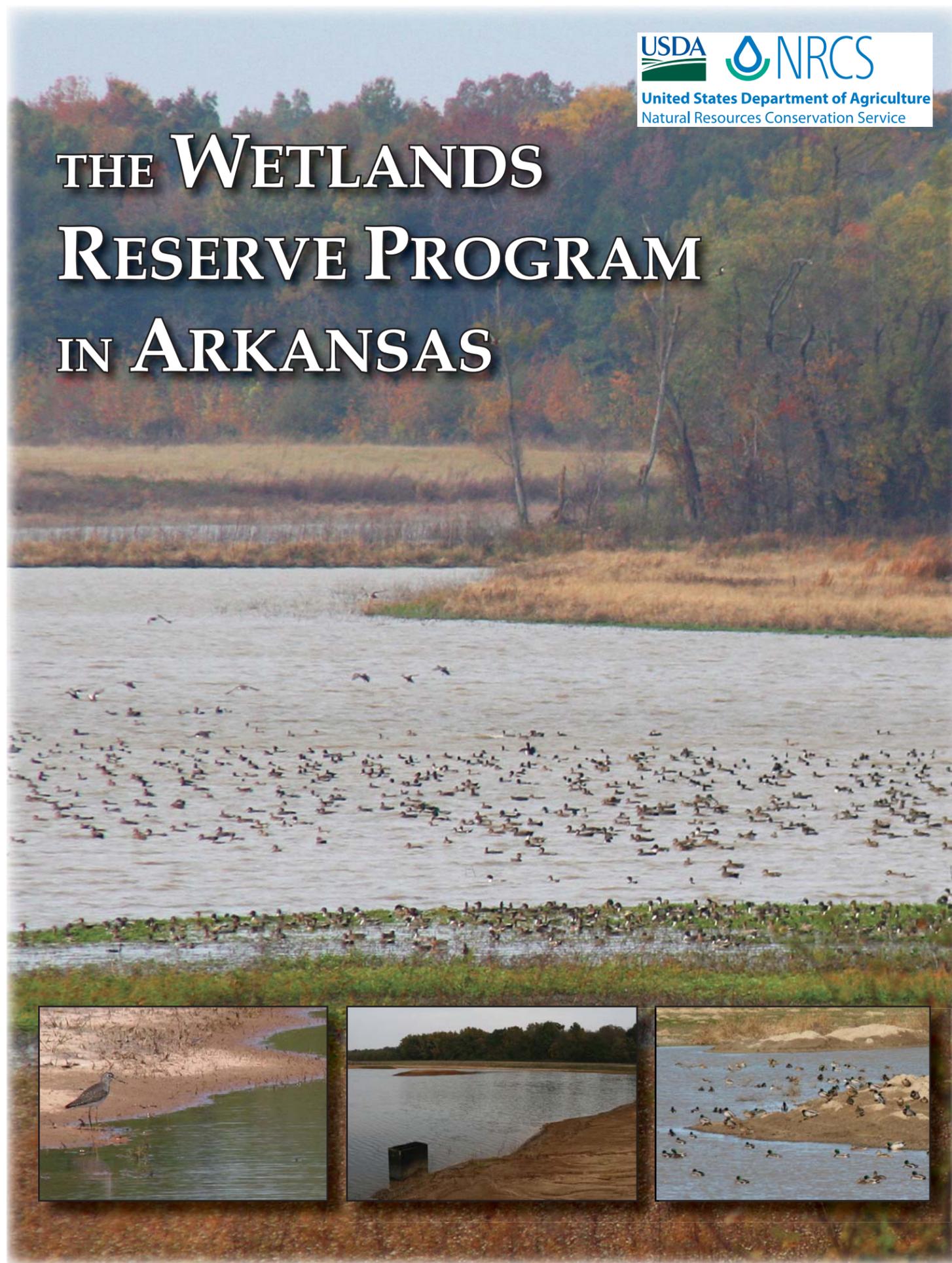
for wild creatures to move about the farm," says Brendon, as he points out a golden eagle roosting atop a tree along the creek. Most impressive though is more than 176 species of birds and mammals are now found on the easement, where as prior to restoration efforts the count was only 36, (as reported by the SW Arkansas Audubon Society).

Horn came home to the land of his youth and now he is bringing nature home to his land.



**A golden eagle roosts on the property.**

# THE WETLANDS RESERVE PROGRAM IN ARKANSAS





The Wetlands Reserve Program (WRP) is a voluntary conservation program that offers landowners the means and opportunity to protect, restore and enhance wetlands on their property through perpetual easements, 30-year easements or 10-year contracts.

The program is administered by the Natural Resources Conservation Service (NRCS). Technical and financial support is available to landowners who participate in the program.

The program is designed to be an incentive for farmers and ranchers to take suitable acres out of agricultural production.

Eligible lands include:

- ♦ Wetlands cleared and/or drained for farming, pasture or timber production.
- ♦ Lands adjacent to restorable wetlands that contribute significantly to wetland functions and values.
- ♦ Previously restored wetlands that need long-term protection.
- ♦ Drained wooded wetlands where hydrology will be restored.
- ♦ Existing or restorable riparian habitat corridors that connect protected wetlands.
- ♦ Lands substantially altered by flooding where there is a likelihood of successful wetland restoration at a reasonable cost.

Once a tract of land has been accepted into the WRP, the NRCS and its partners work with the landowner to create a restoration plan to restore the wetland functions and values of the property.

This restoration includes creating water impoundments and planting bottomland hardwood trees or other native vegetation.

WRP in Arkansas provides wetland habitat for the millions of migrating waterfowl that visit Arkansas each winter.

### Benefits of Wetlands

Since European settlement of North America, the United States has converted more than 118 million acres of wetland, leaving only 103 million acres. These remaining wetlands are essential to the health of our environment for many reasons.

*Ecosystem Restoration* – The Lower Mississippi River Valley was once covered with 24 million acres of bottomland hardwood forests, a majority of which flooded each year. This vast wet forest was an ecosystem that supported plants and animals found no where else on earth. Although only 4.4 million acres of these forests are left, discoveries such as the ivory-billed woodpecker remind us of how important these areas are. The WRP is an integral part of the plan to increase what is left of the bottomland hard-

wood forests by returning less productive farmland back into wetlands.

*Floodwater Retention* – Wetlands act as traps that hold back floodwater and slow down its flow into major creeks and rivers. This lessens the impacts of floods. It is estimated if 3 percent more wetlands were present in the Upper Mississippi River, the flood of 1993 would have been prevented.

*Carbon Sequestration* – One of the most available sources of fighting global climate change is through the planting of trees. The WRP plants millions of hardwood seedlings each year, which continually remove carbon dioxide from the environment.

*Water Quality* – Wetlands have been called nature's sponge because of their ability to remove toxins from the water supply. A small strip of forested wetland along a stream can remove up to 80 percent of phosphorous and up 90 percent of nitrogen from water. Wetlands also serve to slow down the flow of water during a flood. As the water slows down, it drops the soil particles it is carrying before they can enter into waterways, improving the water quality for fish and aquatic plants.

*Wildlife Observation* – Wetlands provide a perfect location for observing wildlife. Many species of neotropical migrant songbirds, waterfowl, amphibians, reptiles and other animals depend on these habitats.

*Recreation* – Wetlands are a perfect place for recreation, especially hunting. Many WRP sites in Arkansas have been



purchased by the U.S. Fish and Wildlife Service or the Arkansas Game and Fish Commission and are managed for public hunting. These sites have recreated natural wetlands so effectively that they are literally teeming with wildlife.

*Wildlife Habitat* – 43 percent of all endangered species need wetlands for survival. Arkansas' wetlands support more wintering mallards than any other state in the country. The wetlands along the Mississippi River are important resting and feeding areas for the millions of songbirds that migrate through Arkansas each year.

To learn more about WRP, visit <http://www.ar.nrcs.usda.gov/programs/wrp.html>, or contact the local USDA/NRCS field service center.



### Arkansas WRP Facts

- ♦ The Geographic Cap Rates for 2010 are \$1,100 per acre for permanent and \$825 per acre for 30 year easements. The cap is evaluated each year.
- ♦ Enrolled more than 200,000 acres in the Wetlands Reserve Program on more than 500 easements.
- ♦ Provided assistance for the planting of more than 68,000 trees.
- ♦ Projects in 40 counties in each area of the state.

*Wetlands are among the most productive ecosystems in the world. They provide countless economic and environmental benefits to local communities.*