

Fall 2003

## The Rise and Fall of Louisiana's Agricultural Wetlands?

Louisiana's half million acres of rice and crawfish production systems provide numerous wetland benefits, including short-term and seasonal habitat for hundreds of species of birds. Yet the land area of these systems in any given year is highly dependent on farm policy and price fluctuations in global commodity markets. A recent study by the LSU Center for Natural Resource Economics and Policy (CNREP) provides insight into the economic, environmental, and political forces shaping the future of these agricultural wetlands.

### Looking Back

Production of rice began in Louisiana nearly 300 years ago. Initially, rice was grown for local consumption and was limited to small fields near the Mississippi River. After the Civil War, production increased substantially, especially when mechanized techniques began to be used for producing rice in the broad, flat, prairie soils of Southwest Louisiana.

On average, since the 1930s, 530,000 acres of rice have been harvested annually in Louisiana. This means that over one-half million acres of agricultural wetland habitat is created and managed by rice farmers in Louisiana each year. Unfortunately, trend analysis indicates this acreage has been decreasing gradually over the past 30 years (below).

Louisiana's agricultural wetlands are declining



Production of crawfish in conjunction with rice farming in Louisiana dates back to the early twentieth century. By the 1960s consistent acreage levels (110,000 acres annually) were attained. Unfortunately, drought and market conditions have caused crawfish acreage to decline recently by 26% from previous levels. Correspondingly, agricultural wetlands available for waterfowl and other organisms have declined.

### **Economic Sustainability?**

Like other producers, rice farmers are concerned with production costs and revenues or economic returns. In Louisiana this year, average direct cash expenses or variable costs for producing rice are estimated to be \$400 per acre. Of total cash expenses, 39% are devoted to planting, 47% are maintenance costs (including 18% for irrigation expenses), and 14% are harvesting and drying costs.

#### Revenues from LA rice production are often well below production costs (\$/acre)



Over the past three decades however, revenues solely from rice sales covered average cash expenses only one-third of the time. Furthermore, if certain non-cash expenses, such as overhead and equipment replacement costs are included, most rice farmers have had negative returns to management for a quartercentury (above).

Producers have confronted these economic conditions by altering practices to cut costs and not planting marginal fields. Producers use market price information for planting decisions. Recent low prices caused producers to plant 13% fewer acres of rice in Louisiana. Market prices respond, in part, to world consumption and supply patterns. If rice consumption increases domestically or globally and supply remains relatively constant, then market prices generally will increase. This is why the rice industry and the United States government have tried to increase domestic consumption and US rice exports.



Expectations are that the current situation in the US rice markets (above), will continue in the near-term. However, as domestic consumption increases, US prices are pushed higher relative to foreign market prices, so export demands for US rice may decrease. In fact, the USDA projects a 30% reduction in the US share of the world rice export market within the next ten years. Given this situation, the future of rice production, and by extension agricultural wetlands, is troubling.

### **Rice Subsidies**

To help rice farmers, the US government also provides them with commodity program payments or direct subsidies based on their production history. From the 1980s through the mid 1990s, about one-third of gross revenues for rice producers came from direct subsidies. However, since the 1996 Farm Bill, the size of these subsidies has increased substantially. Moreover, since 2000, rice producers received over 60% of their revenues from direct subsidies (below). The total amount paid direct to rice farmers by U.S. taxpayers in three years was \$4.3 billion.





### Ancillary Income?

Given the negative economic pressures facing the industry, Louisiana rice farmers are increasingly searching for ancillary sources of income. The seasonal leasing of agricultural wetlands for waterfowl hunting has become a popular means of generating additional income. While agricultural wetlands have historically demanded relatively high lease values, data from the LSU AgCenter indicates that competition could eventually limit waterfowl lease income.

The average value of private hunting leases in Louisiana has decreased 25% since 1993. One explanation for this decline is the threefold expansion of lease acreage made available in the past decade. Additional lease acres are entering the market as declining profitability is forcing more farmers into fee-based hunting to support farm income. Other research indicates that demand for waterfowl hunting in Louisiana has declined in recent years. Thus, additional expansion of lease acreage could lead to reductions in waterfowl lease values.

Like duck hunting, bird watching is an activity that could provide an alternative source of revenue on agricultural wetlands. The shallow water habitat created by seasonally flooded fields is not only ideal for resident and migratory waterfowl, but also for many other avian species. To date, more than 278 species of birds have been documented on agricultural wetlands in Southern Louisiana (see page 4).



However, opportunities for fee-based birding on Louisiana's agricultural wetlands may be declining. A survey conducted by the US Fish and Wildlife Service in 2001 seems to contradict a widely held belief that bird watching activity in Louisiana is expanding. According to the Survey of Hunting, Fishing, and Wildlife-Associated Recreation, between 1991 and 2001, U.S. expenditures for wildlife viewing grew 40%, yet Louisiana had a 42% reduction in those expenditures (above).

Researchers have been unable to explain the reduction, and conjecture on the subject ranges from human population exodus to sampling error. Taken at face value, the report suggests that the income potential from bird watching on farmland is very limited. Ultimately, a programmatic response may be required to address the loss of avian habitat and other environmental services provided by agricultural wetlands.

### **Conservation Options?**

Under the "Swampbuster" provision of the 1985 Farm Bill, farmers who converted wetlands for agricultural use risked losing their commodity subsidy payments. This disincentive was highly effective in helping to offset agricultural wetland conversions, which remained as high as 280,000 annually through the early 1980s.

Subsequent bills in 1990 and 1996 developed funding for long-term or perpetual easements to restore wetlands. Louisiana has become a national leader in such easements through the Wetland Reserve Program (WRP). These easements are designed to restore many of the same environmental amenities that are provided by working agricultural wetlands. Yet, most WRP easements are located in northeastern parishes, and comparatively little conservation funding is spent in the southwest, where more than half of the state's rice production is located.

The 2002 Farm Bill provides some relief through "working lands" programs that address environmental concerns without taking land out of production. Authorized funding for all working lands programs now stands at \$12 billion through 2007, a 1000% increase over 1996 levels. Cumulative budget projections indicate a gradual shift from conservation easements to working lands programs over the next decade (below).





The largest such initiative, the Environmental Quality Incentives Program (EQIP), is slated to provide \$9 billion for environmental stewardship on working agricultural lands. And though some of these funds will invariably be used to cost-share conservation practices on Louisiana rice farms, the majority of EQIP funding is earmarked for the livestock industry.

The new Conservation Security Program (CSP) could provide an additional \$2 billion in payments by 2007 under a new system designed to compensate farmers for previously implemented conservation practices. Though CSP is described as a program to "reward the best and motivate the rest", some critics have labeled it an entitlement. Indeed, no CSP funds were appropriated in 2003, and only \$22 million is expected to be available nationwide when the program debuts in 2004. Louisiana rice farmers wanting to participate in this first round of CSP funding will need to have a conservation plan already in place by the end of this year. However, full implementation of CSP, or any other conservation program in the 2002 Farm Bill, remains highly uncertain. Authorization is not appropriation, and competing budgetary interests and a growing budget deficit could ultimately affect the apportionment process.

## **Relevant Questions**

Declining markets for rice and crawfish, limited opportunities for ancillary income, and uncertainties regarding conservation programming all contribute to a bleak outlook for Louisiana's agricultural wetlands. Without additional government support, 30% of this acreage could be lost in the next few years. However, rice producers are already heavily subsidized and additional commodity payments might only serve to exacerbate the supply/demand imbalance by encouraging excess production.



# Economic forces could cause Louisiana to lose 160,000 acres of agricultural wetlands in the next decade.

Taxpayers are increasingly questioning commodity payments, asking: "What are the societal benefits we receive for supporting agriculture in general and rice production in particular?" And yet, a 30% reduction in rice acreage in Louisiana would equate to a 160,000 acre loss of seasonal wetland habitat.

What would become of this unplanted acreage? How would the loss affect waterfowl and other species associated with these systems? Given that 57% of rice production costs are tied to planting and irrigation, it's unlikely that the acreage would remain as functional wetlands.

During the past two decades, as the domestic rice industry has weakened, public support and funding for conservation has strengthened. Still, no conservation programs are specifically designed to address the environmental amenities provided by agricultural wetlands. Two relevant questions emerge from this situation: 1) has the time come for a reevaluation of the rationale and methodology for supporting rice farmers? and 2) without additional intervention, can Louisiana's agricultural wetlands be sustained? Clearly, it is not too early to begin discussing these issues if programmatic remedies are to be sought in next farm bill.

Source: Huner, J.V., Westra, J.V. and R.H. Caffey (2003) The Economic and Environmental Significance of Louisiana's Agricultural Wetlands as Water-bird Habitat, Society of Wetland Scientists, 24th Annual Meeting, New Orleans, LA June 2003, abstracts, p. 129.



#### Birds Recorded at Agricultural Wetland Study Areas in Southern Louisiana (American Ornithological Society Common Names)

**Pied-billed Grebe Horned Grebe American White Pelican Brown Pelican Neotropic Cormorant Double-crested Cormorant** Anhinga **Magnificient Frigateb American Bittern** Least Bittern Great Blue He **Great Egret** Snowy Egre Little Blue Reddis ht-Heron ight-Heron crowned I

Iture **Turkey Vulture** Black-bellied Whistling-Duck Fulvous Whistling-Duck **Greater White-fronted Goose Snow Goose** Ross's Goose Canada Goose Wood Duck Gadwall American Wigeon Mallard Mottled Duck Blue-winged Teal Green-winged Teal **Ring-necked Duck** Lesser Scaup Surf Scoter Long-tailed Duck Bufflehead **Common Goldeneye Hooded Merganser** Red-breasted Merganser **Ruddy Duck** Osprey Swallow-tailed Kite **Mississippi Kite Bald Eagle** Northern Harrier Sharp-shinned Hawk **Cooper's Hawk** Harris's Hawk **Red-shouldered Hawk** Broad-winged Hawk **Red-tailed Hawk American Kestrel** Merlin **Peregrine Falcon** 

ble Gallinule nmon Moorhen American Coot Sandhill Cran Black-bellied Plover American Golden-Plover Vilson's Plover Semipalmated Plover Killdeer Black-necked Still American Avocet Greater Yellow/egs Lesser Yellowlegs Solitary Sandpiper Willet Spotted Sandpiper Upland Sandpiper Whimbrel Long-billed Curlew Hudsonian Godwit **Marbled Godwit** Ruddy Turnstone Red Knot Semipalmated Sandpiper Western Sandpiper White-rumped Sandpiper Baird's Sandpiper **Pectoral Sandpipe** Dunlin Curlew Sandpiper Stilt Sandpiper **Buff-breasted Sandpiper** Short-billed Dowitcher Long-billed Dowitcher Wilson's Snipe American Woodcocl Wilson's Phalarope Laughing Gull Franklin's Gull Bonaparte's Gull **Ring-billed Gull** Herring Gull **Gull-billed Tern** Caspian Tern **Royal Tern** Common Tern Forster's Tern Least Tern Black Tern Rock Dove Eurasian-Collared Dove White-winged Dove Mourning Dove Inca Dove **Common Ground-Dove** Black-billed Cuckoo Yellow-billed Cuckoo Groove-billed Ani Barn Owl Eastern Screech-Owl Great Horned Owl Barred Owl

Wild Turkey

Northern

Chimney Ruby-throated Hummingbird Rufuous Hummingbird Belted Kingfisher Red-headed Woodpeck Red-bellied Woodpecker Yellow-bellied Sapsucker Downy Woodpecker Hairy Woodpecker Northern Flicker North Pile Wood-P tern Phoeb ermillion Flycatcher Great Crested Flycato Western Kingbird Eastern Kingbird Scissor-tailed Flycatcher Loggerhead Strike White-eyed Virec Yellow-throated **Plumbeous Vire** Blue-headed Vired Warbling Vireo Philadelphia Vireo Red-eyed Vireo Blue Jay American Crow Fish Crow Horned Lark **Purple Martin** Tree Swallow Northern Rough-winged Swallow Bank Swallow **Cliff Swallow** Barn Swallow Carolina Chickadee Tufted Titmouse **Brown Creeper** Rock Wren Carolina Wren **Bewick's Wren** House Wren Winter Wren Sedge Wren **Golden-crowned Kinglet** Ruby-crowned Kinglet Blue-gray Gnatcatcher Eastern Bluebird Wood Thrush American Robin **Gray Catbird Northern Mockingbird Brown Thrasher** European Starling American Pipit Sprague's Pipit Cedar Waxwing

ellow Warbler agnolia Warbler low-rumped Warbler -throated Green Warbler urnian Warbler hroated Warbler e Warbler d V Wilson's W Canada Warl Yellow-breast Summer Tanage Scarlet Tanager Eastern Towhee Chipping Sparrow Field Sparrow Vesper Sparrow Lark Sparrov Savannah Sparrow Fox Sparrow Song Sparrow Lincoln's Sparrow Swamp Sparrow White-throated Sparrow White-crowned Sparrow Northern Cardinal **Indigo Bunting Painted Bunting** Red-winged Blackbird Eastern Meadowlark Yellow-headed Blackbird **Rusty Blackbird Brewer's Blackbird Common Grackle Boat-tailed Grackle Great-tailed Grackle** 

Golden-winged Warbler

**Orange-crowned Warbler** 

**Tennessee Warbler** 

**Nashville Warbler** 

Northern Parula

Source: Huner, Jeske, and Norling (2002) Waterbirds 25 (Special Publication 2):66-78.

**Blue-winged Warbler** 

Brown-headed Cowbird Orchard Oriole

**Baltimore Oriole** 

American Goldfinch

**Purple Finch** 

House Finch

House Sparrow

## USDA Releases \$55.7 Million To Restore And Protect Wetlands

USDA announced the availability of \$55.7 million for the Wetlands Reserve Program (WRP), to help protect wildlife, habitats and ecosystem health. "The Bush Administration is committed to helping farmers and ranchers protect the environment," said USDA Secretary Ann Veneman.

"These funds will help farmers and ranchers voluntarily protect and restore our country's valuable wetland ecosystems." NRCS is utilizing an additional \$42 million of WRP financial assistance funds from the Commodity Credit Corporation for the FY 2003 enrollment.

These funds supplement the initial allocation of \$240 million for WRP and provide additional financial resources needed to meet the Administration's enrollment goal of 200,000 acres this fiscal year. The remaining \$13.7 million are funds being reallocated to states with the highest WRP need or are needed to ensure that prior year enrollment levels are maintained.

Source: http://www.usda.gov/news/releases/2003/09/0315.htm



## Links Between Agricultural and Conservation Policy Examined in Report

Farmers and landowners face complex regulations and programs that influence their decision making. Little is known about how programs and regulations interact or their net effects on the behavior of landowners.

To address this knowledge gap, the Northeast Regional Center for Rural Development (NERCRD) has published "Linkages Between Agricultural Conservation Policies." The report presents the results of research conducted to date and an assessment of challenges that remain in this subject matter area for researchers and policymakers. Topics include agricultural land preservation and conservation impacts on quality of life and farm income, nonpoint-source pollution, incentive-based payments and environmental quality, green payments, and building the scientific knowledge base needed to inform policy and programs.

Dr. John Westra, an Assistant Professor of Agricultural Economics, LSU Ag Center and with the LSU Center for Natural Resource Economics and Policy, attended the workshop and is co-author of one article featured in the proceedings. His research focused on the extent to which specific conservation practices implemented under certain conservation programs of the latest Farm Bill translated to measurable improvements in water quality and the fisheries in the study areas. Westra's findings provide insight into the economically efficient geographic placement of best management practices to achieve the desired results of conservation programs. According to Westra, "there's an increasing need to integrate economic and environmental analyses when evaluating conservation policy. Research scientists currently have very powerful analytical tools that can be integrated to evaluate the complex, sometimes competing goals of environmental policy. To get the most benefit from the limited conservation funding, we need to target our resources more efficiently."

The new report is available at the NERCRD website at: http://www.cas.nercrd.psu.edu/ For a paper copy, contact the Center at nercrd@psu.edu For additional information contact Stephan Goetz, NERCRD Director, at (814) 863-4656 or Sally Maggard at 202-720-0741, smaggard@csrees.usda.gov.



## **Study Broadens Knowledge of Easements**

A new study on agricultural easement programs finds that use of this land conservation tool is most prevalent in suburban and semi-rural parts of major metropolitan areas-counties with populations of more than 100,000 that have been experiencing rapid population growth for years. A National View of Agricultural Easement Programs is the most in-depth and comprehensive analysis of agricultural easement programs undertaken in the United States.

The report profiles 46 agricultural easement programs in 15 states-nearly half of all publicly funded farmland protection programs in the nation. The 46 programs studied have spent a total of \$1.8 billion to protect 887,000 acres on 5,800 farms. The study was done by American Farmland Trust and the Agricultural Issues Center, University of California, in collaboration with Farm Foundation.

"This study reveals a diversity of ways that farm conservation easement programs are conceived, managed and funded," said project director Alvin D. Sokolow, University of California-Davis. "What all of the programs have in common, however, is that they were launched by a show of strong public support for farmland protection"

The report, along with maps of land protected through most of the 46 programs studied, is available at www.farmland.org and www.farmfoundation.org. Additional reports from the study will address acquisition strategies, land use planning and the impacts and effectiveness of easement programs.

Source: Robyn Miller, Media Manager , American Farmland Trust



# Symposium to focus on Socioeconomic Research in Coastal Systems

The LSU Center for Natural Resource Economics and Policy (CNREP) is pleased to announce a Call for Abstracts for a conference entitled *The Challenges of Socioeconomic Research in Coastal Systems: Valuation, Analysis, and Policy Development.* 

This conference - to be held May 27 & 28, 2004 in Baton Rouge, Louisiana - will focus on the opportunities and challenges of socioeconomic research in coastal systems, with particular emphasis on economic valuation and its use in developing coastal zone management policy.



Potential session topics include, but are not limited to, market and nonmarket valuation of coastal resources, environmental benefit-cost analyses, economic linkage/impact assessment, input-output modeling, and comparative assessments of resource management and restoration policy. Basic and applied research, extension oriented, and policy discussion submissions are all welcome.

The conference will be of interest to anyone interested in coastal zone management policy, including applied economists, sociologists, other relevant academics, and federal, state, and local policy makers. A balanced mix of technical and non-technical presentations are planned, and noted research and policy professionals will be invited to present their current work and future ideas in keynote addresses to the conference.

The deadline for abstract submissions is January 15, 2004. Information regarding the conference and the call for abstracts is available online at: http://www.agecon.lsu.edu/CNREP/

For additional information contact Rex Caffey (225) 578-2266, rcaffey@agctr.lsu.edu.

## Nominations Sought for National, State Wetland Stewardship Awards

## National Wetlands Awards Program

Since 1989, the National Wetlands Awards Program. Since the 1998 Awards program has recognized individuals from across the country who have demonstrated extraordinary effort, innovation, and excellence at the regional, state, or local level.

This year's Awards feature new categories, including Education and Outreach, Science Research, Conservation and Restoration, Landowner Stewardship, State, Tribal and Local Program Development, and Wetland Community Leader. Organizations and federal employees are not eligible.

The NWA program is sponsored by the Environmental Law Institute with support from five federal co-sponsoring agencies: the U.S. Environmental Protection Agency, the Natural Resources Conservation Service, the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the USDA Forest Service.

The forms for the 2004 National Wetlands Awards are now available. Nomination forms are due December 15, 2003. To download the on-line nomination form, go to: http://www.eli.org For additional information, contact Erica Pencak, Wetlands Program, (202) 939-3822.

## Louisiana Coastal Stewardship Awards

Since 1994, the Baton Rouge-based Coalition To Restore Coastal Louisiana has sponsored the Coastal Stewardship Awards Program to recognize those individuals and groups who have made significant contributions to the preservation and restoration of Louisiana's coastal wetlands. These contributions set an example of stewardship and serve as a vision for the future.

Nominees for the Coastal Stewardship Award are judged on the merit of their work and the significance of their contribution. Potential nominees include volunteers, civic and non-profit organizations, religious groups, persons from business and industry, employees of local, state, and federal agencies, contractors, teachers, professors, elected officials, and any others who create new ideas for restoration or advocate for better protection of our coastal wetlands.

For additional information on this program or to receive a nomination packet, contact Steven Peyonnin at the Coalition to restore Coastal Louisiana at 1-888-522-6278, stevenp@crcl.org.





## **Upcoming Meetings and Events**

Nov. 5	<b>BTNEP Management Conference Meeting</b> Barataria-Terrebonne National Estuary Program, 9:30 am Nichols State University, Deborah Schultz (800) 259-0869. http://www.btnep.org/
Nov. 6	Ocean Commotion, LSU Assembly Center, Baton Rouge, La. La Sea Grant, Rachel Sommers, (225-578-6331) http://www.lsu.edu/university_relations/oceancommotion/
Nov. 7-10	Back to the Bayou Paddle Trip Barataria-Terrebonne National Estuary Program Deborah Schultz (800) 259-0869. http://www.btnep.org/
Nov. 14-15	Informal Science and Environmental Educator Workshop, LUMCON, Cocodrie, La. Contact Jessica Kastler, 985-851-2848
Nov. 19	<b>CWPPRA Task Force Meeting</b> La Dept. of Wildlife & Fisheries - Louisiana Room 2000 Quail Dr. Baton Rouge, La., 9:30 am. http://lacoast.gov/cwppra/
Nov. 19	<b>CWPPRA 13th Priority Project List Review</b> Vermilion Parish Police Jury, Courthouse Building, Courtroom 1, 2nd floor. 100 N. State St., Abbeville, La. http://lacoast.gov/cwppra/
Nov. 20	<b>CWPPRA 13th Priority Project List Review</b> U.S. Army Corps of Engineers, New Orleans District, District Assembly Room-A, 7400 Leake



Ave. New Orleans, La. http://lacoast.gov/cwppra/



Earlier versions of the Louisiana Wetland News written by Dr. Paul Coreil are now available online at the LWN website. http://www.agecon-extension.lsu.edu/CaffeyWeb/

## Louisiana Wetland News Online

The Louisiana Wetland News web page has been expanded to include previous versions of the newsletter produced by Dr. Paul Coreil from the period of 1992 to 1998. These older newsletters are provided as scanned, PDF files. With this expansion, the LWN website provides a more complete archive of the history of Louisiana's wetland and coastal resource policy during the past decade.

If you have not already done so, I encourage you to obtain this newsletter through an e-mail subscription. By subscribing, you allow us to better track our readership and provide you with valuable updates between each issue.

If you would like to receive an electronic copy of this newsletter, please send an e-mail addressed to **rcaffey@agctr.lsu.edu** In the message body simply type your full name and the words, "Subscribe LWN".

Thank you,

Re H. Caffy

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