



Louisiana State University

Agricultural Center

Louisiana Cooperative Extension Service



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Louisiana Wetlands News

LOUISIANA WETLAND PLANT PRODUCERS ASSOCIATION ORGANIZED

NOVEMBER 1995

On August 22, 1995, the Louisiana Wetland Plant Producers Association, a new coastal restoration-linked business organization, was officially registered in the Louisiana Secretary of State's office as a non-profit corporation. Vegetative planting projects have and will continue to be critical to the overall coastal restoration effort in Louisiana. Wetland plant producers see the formation of the Association as a positive step in assuring that high standards are maintained and good quality plants are available in adequate quantities.

The articles of incorporation list the following primary Association purposes: 1) safeguard the economic interests and general welfare of the wetland plant producers in Louisiana; 2) develop professional standards,

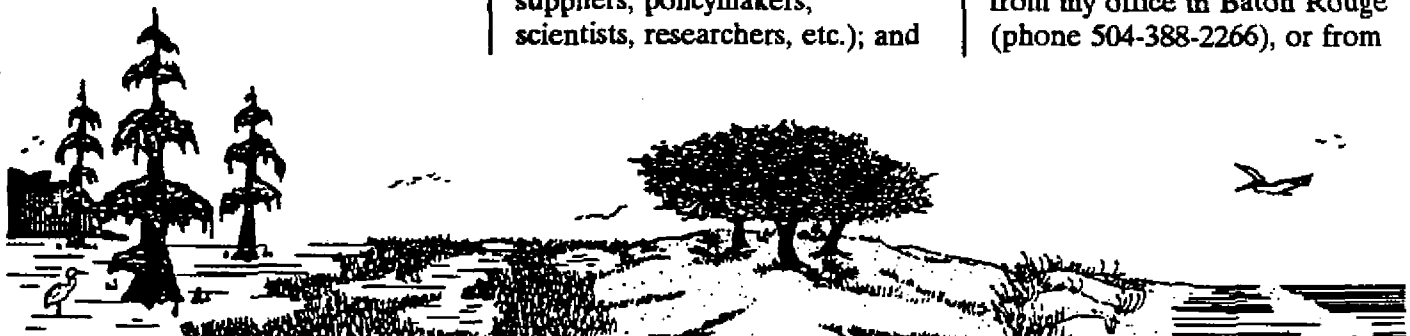
standards of quality and performance, and standards of ethical practice for Association members; 3) promote legislation providing for proper wetland plant producer practices and development of this industry in Louisiana; and 4) enlighten the public with respect to the wetland plant producing industry in Louisiana.

In an effort to promote these goals, the Association elected to include three classes of memberships: 1) Producer Members (\$100 per year) - a person who has been a licensed nurseryman for at least one year and has at least one year's experience in the production of wetland plants; 2) General Members (\$25 per year) - any person interested in the continued viability of coastal restoration efforts involving vegetative plantings (general public, landowners, business suppliers, policymakers, scientists, researchers, etc.); and


3) Associate Members - honorary memberships granted to individuals who have supported the efforts and purposes of the Association.

Association officers include Jeff Murphy from Black Lake Marsh, Inc., located in Lake Charles, president; Daniel Broussard from Coastal Plants located in Abbeville, vice-president; Earl Matherne from Matherne Wildlife Services located in Des Allemands, treasurer; and Pat Murphy from Gulf Coast Nursery Supply located in Hackberry, secretary.

Anyone interested in joining the Association and supporting Louisiana's coastal restoration effort is urged to contact Jeff Murphy, Black Lake Marsh, Inc., 1200 Paris Street, Lake Charles, LA 70605, phone (318) 762-4242. Additional information about the Association can also be obtained from my office in Baton Rouge (phone 504-388-2266), or from



THE LOUISIANA COOPERATIVE EXTENSION SERVICE PROVIDES EQUAL OPPORTUNITIES IN PROGRAMS AND EMPLOYMENT. LOUISIANA STATE UNIVERSITY AND A. & M. COLLEGE, LOUISIANA PARISH GOVERNING BODIES, SOUTHERN UNIVERSITY, AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

 A State Partner in the Cooperative Extension System

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Mike Materne (NRCS plant materials specialist) at (504) 389-0335.

As of this newsletter, the Association is planning to hold its first Association Annual Meeting on the LSU Campus sometime in February 1996. Details and final dates will be forwarded in early January. ■

COASTAL CONSERVATION AND FISHERIES - SUMMARY OF MEETINGS

Louisiana is losing an average of more than 35 square miles of coastal wetlands per year. One of the most compelling arguments in favor of the expenditure of public funds to address coastal land loss is the vital link between coastal marshes and commercial and recreational fisheries. More than 95% of the commercial and recreational fish landed in the Gulf of Mexico depend heavily on estuarine (marsh) wetland habitats. Coastal wetlands serve as a valuable nursery for shrimp, blue crabs, oysters, menhaden, and numerous marine finfish species.

To highlight the fisheries associated risks connected with continued coastal land loss in Louisiana, the Louisiana Department of Natural Resources, the Louisiana Department of Wildlife and Fisheries, the LSU Agricultural Center's Louisiana Cooperative Extension Service, and the Louisiana Sea Grant College Program jointly sponsored 10 educational meetings targeting both recreational and commercial fishermen.

Meetings were held in Cameron, Baton Rouge, Bayou Vista, Delcambre, Houma, Lafitte, Cutoff, Port Sulphur, Slidell, and Chalmette. The primary meeting objectives were 1) provide background information related to coastal land loss in Louisiana and its impact on the state's economy, particularly as it relates to fisheries, 2) provide information regarding the coastal restoration efforts in Louisiana, 3) explain the biological reasons underlying the dependence of fisheries on estuarine wetland habitats, 4) contrast the changes expected to occur as a result of conservation and restoration efforts with those expected to occur without restoration, and 5) receive, record, and address comments and questions presented by meeting attendees.

More than 400 fishermen attended the meetings and identified almost 200 issues and/or concerns related to coastal restoration and fisheries in Louisiana. The issues/concerns expressed by fishermen and agency responses were summarized in a report titled, "Coastal Conservation and Fisheries--Challenges and Opportunities: A Summary of 10 Meetings." A wide diversity of concerns was identified at the meetings including impacts of freshwater diversions on saltwater fisheries, freshwater diversions and water quality, marsh management, shell dredging, and barrier island and barrier shoreline erosion.

Anyone interested in obtaining a free copy of the summary should contact my office in Baton Rouge. ■

AMENDMENT 9 PASSED BY STATE VOTERS



Under Louisiana Law, private lands that erode and become open navigable water revert to state ownership. Private landowners, however, retain the right of reclamation on lands that have eroded since 1921. Because the constitution prohibits the state from selling or donating waterbottoms or mineral rights, many coastal restoration projects have been delayed because of private landowners' loss of the right of reclamation. In other words, when the state or federal government comes in and restores an area that has eroded since 1921, the original private owner loses his or her right to reclaim the eroded land which reverted to the state when it became open water.

In an effort to address this dilemma, voters approved Amendment 9 to the Louisiana Constitution in the October statewide primary. Amendment 9 gives the state the authority to negotiate mineral rights claims on eroded lands to facilitate the construction of coastal restoration projects on public lands subject to a private right of reclamation. Workable implementing legislation must now be introduced and approved by the Louisiana legislature for this Constitutional Amendment to be effective. ■

**MITIGATION
REGULATIONS FOR THE
LOUISIANA COASTAL
ZONE**

In August of 1995, the Louisiana Department of Natural Resources released the final formally adopted version of the Mitigation Regulations for the Louisiana Coastal Zone. The primary goal of the regulations is the adoption of a statewide coastal development policy that assures there will be no-net-loss of wetland functions and values associated with permitted activities.

The regulations basically provide for 1) avoiding and minimizing adverse impacts identified in the permit review process, 2) restoring impacted sites when appropriate, 3) quantifying anticipated unavoidable wetland ecological value losses (and gains), 4) requiring appropriate and sufficient compensatory mitigation, 5) establishing mitigation banks, 6) establishing advanced mitigation projects, and 6) evaluating and processing requests for variances from the compensatory mitigation requirement.

Specifics include:

(1) When DNR determines that an activity will require a Coastal Use Permit (CUP) (individual permit or general permit), the Secretary of DNR must ensure that adverse ecological impacts are avoided and minimized as much as possible. Project modifications that accomplish this goal may become a condition of permit approval during this stage of the permit review process.

(2) If a net loss of wetland ecological value is anticipated as a result of the permitted activity, compensatory mitigation will be required. A fee will be charged for the evaluation, processing, and determination of compensatory mitigation requirements, and this fee will be in addition to any cost incurred to implement the mitigation project.

Noncommercial activities which directly impact 1 acre or less of vegetated wetlands will be assessed a compensatory mitigation fee of \$50. All other activities shall be assessed according to the following table:

<u>Altered Acres</u>	<u>Mitigation Processing Fee</u>
0 - 0.5	\$ 150
0.51 - 1	300
1.01 - 2	600
2.01 - 3	900
3.01 - 4	1,200
4.01 - 5	1,500
5.01 - 10	2,250
10.01 - 15	3,750
15.01 - 25	6,000
25.01 - 100	12,000
> 100	15,000

Unless waived or reduced by the Secretary, the compensatory mitigation processing fee shall apply even if the secretary grants a full variance to the compensatory requirement.

Compensatory mitigation options include:

a) use or acquisition of an appropriate type and quantity of mitigation credits from an approved mitigation bank;

b) use or acquisition of

an appropriate type and quantity of advanced mitigation credits from an advanced mitigation project (defined below);

c) implementation of an individual mitigation measure or measures to offset the unavoidable ecological value losses;

d) monetary contribution to the affected landowner, affected parish, and/or the Louisiana Wetlands Conservation and Restoration Fund; or

e) "other" mitigation options approved by the Secretary.

(3) Anticipated net losses of ecological value will be quantified as cumulative habitat units (CHUs) or average annual habitat units (AAHUs), whichever is most appropriate.

(4) The Secretary will consider proposals by federal and state agencies, local governing bodies, and private entities, to establish wetland mitigation banks. Fees will include an initial evaluation fee, a habitat evaluation fee, an establishment fee, and a periodic review fee. Mitigation banks will generally require that a conservation easement be filed in the parish courthouse assuring that the habitat improvement benefits are maintained within the bank area for the required time period. The conservation easement must include a timber harvesting plan (if appropriate), other

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compatible uses, and language that assures that all other activities (non-compatible uses) that may reduce the ecological value of the site will be prohibited. Marsh mitigation banks (conservation easements) must be maintained for 20 years. Forested habitat associated mitigation banks (conservation easements) must be maintained for 50 years "or more." The easement will be held by DNR, however, the Department may convey a "third party right of enforcement" to any entity mutually agreed upon by the Secretary and the mitigation bank operator.

(5) Advanced Mitigation Projects, or projects implemented to create, restore, protect, and/or enhance wetlands for the purpose of producing ecological values, will also be able to earn mitigation credits to offset activities causing impacts. The area from which credits accrue for advanced mitigation projects will generally not exceed 20 acres. Permit applicants may acquire advanced mitigation credits from the sponsor of an approved advanced mitigation project to meet compensatory mitigation requirements subject to specific limitations. To establish an advanced mitigation project, non-refundable fees will be charged for the initial evaluation (\$50), establishment (\$100), post-implementation evaluation (\$250), and periodic review (\$50).

(6) A permit applicant may implement individual mitigation

measures to satisfy the compensatory mitigation requirements of a proposed activity.

(7) Compensatory mitigation may be accomplished by monetary contribution to the affected landowner, affected parish, and/or the Louisiana Wetlands Conservation and Restoration Fund. These funds must be used to offset anticipated unavoidable net losses of ecological values according to DNR guidelines. The Secretary determines the amount of the monetary contribution based on similar restoration costs conducted within the affected basin using annual base mitigation costs. The annual base mitigation costs (ABMC) are based on example projects which could feasibly be constructed within each habitat type and basin, and result in the production of one AAHU for one year. Saline marshes in the Breton Sound Basin have been given the highest ABMC values (\$518) and bottomland hardwoods have been given the lowest (\$32).

(8) The Secretary may grant a variance from the compensatory mitigation requirements included in this rule. All notices of intent to consider a variance must, however, be published in the official state journal and provided to the local governing authority of the parish or parishes where the proposed permitted activity will be taking place.

To reduce the required Coastal Wetlands Planning, Protection and Restoration Act

(CWPPRA) state match from 25% to 15%, Louisiana must implement a coastal zone mitigation program that will achieve "no-net-loss" from permitted activities. This adopted mitigation rule is expected to represent a major step toward accomplishing this goal and increasing the amount of federal funds available for the coastal restoration program.

If you have any questions or would like a copy of the mitigation rule, contact DNR at (504) 342-7591. ■

DE-AUTHORIZATION OF THREE CWPPRA PROJECTS

The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Task Force recently announced that they would like to de-authorize three previously approved restoration projects.

The three projects are the Dewitt-Rollover Vegetative Plantings Project (Mermentau Basin), the Lower Bayou LaCache Hydrolic Restoration Project (Terrebonne Basin), and the West Bay Sediment Diversion Project (Mississippi Delta).

Project sponsors have requested de-authorization for a variety of reasons. The low vegetative planting survival rates in the Dewitt-Rollover Project area prompted the state and the Natural Resources Conservation Service (NRCS) to recommend cutting the project. Sponsors are concerned about impaired access to fishing grounds and escalating costs associated with the Lower Bayou LaCache

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Project. The West Bay Project has come into question because of the state's overall strategy calling for the effective abandonment of the Mississippi's bird's foot delta in favor of other areas better suited to land building.

Anyone with comments about the de-authorization of these projects should notify the CWPPRA Task Force by December 6. Comments should be mailed to Robert Schroeder, Chief of the Planning Division, New Orleans District, Army Corps of Engineers, P.O. Box 60267-0160, New Orleans, LA 70160. A final decision about these three projects will be announced at the next CWPPRA Task Force meeting December 20 at the Corps' Office in New Orleans. ■

12TH ANNUAL LOUISIANA REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEMS WORKSHOP SET

The 12th Annual Louisiana Remote Sensing and Geographic Information Systems Workshop will be held at the Cajun Dome in Lafayette during April 16-18. The objectives of the workshop are to: (1) present and discuss current research and operational uses of spatial information systems to enhance the management of coastal and urban resources in the Northern Gulf of Mexico and (2) provide a forum for the exchange of information and ideas.

The workshop is being sponsored by the National Biological Service, the Louisiana Department of Natural Resources, the Louisiana Department of Environmental Quality, the Department of Geography and Anthropology at Louisiana State University, the University of Southwestern Louisiana, the National Marine Fisheries Service, the Mid-South Region and Gulf Coast Chapter of the American Society for Photogrammetry and Remote Sensing (ASPRS), and the Louisiana Chapter of the Urban and Regional Information Systems Association (LAURISA).

The workshop will include paper presentations and an interactive session for posters and vendor exhibits. The Mid-South Region of the ASPRS, LAURISA, and the Louisiana ARC/INFO Users Group will also conduct business meetings at the workshop.

For additional information, please contact: Larry Handley, 318-266-8691 or handleyl@osprey.nwrc.gov; Bo Blackmon, 504-342-4137; Joe Holmes, 504-765-0884; DeWitt Braud, 504-388-6177; Nelson May, 601-688-1213; James Price, 601-688-4859; or Katherine Cargo 504-733-3770. ■

LAKE PONTCHARTRAIN BASIN FOUNDATION/UNO GRASSBED RESTORATION SHOWS SUCCESS

Submerged aquatic vegetation (SAV) in the Lake Pontchartrain Basin provides many important ecological functions, such as preventing

erosion, "recycling" nutrients, removing pollutants, and providing oxygen to the water. SAV also serves as a critical resource for much of the Basin's multi-million dollar fisheries. Research conducted by the University of New Orleans (UNO) has revealed that SAV in Lake Pontchartrain has declined by more than 50% since 1973.

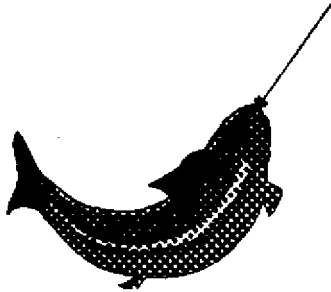
Recently, the Lake Pontchartrain Basin Foundation (LPBF) teamed with UNO to study and restore SAV with the help of community volunteers. The SAV Project, funded through the Johnston Basin Cleanup Program, has combined scientific research and community involvement in the restoration of an ecological community.

The use of trained community volunteers has made the project well-publicized and cost-effective. More than 4,500 Tapegrass plants (*Vallisneria americana*) have been harvested by volunteers and transplanted near Fontainebleau State Park, Bayou Lacombe, and Pointe aux Herbes. The Tapegrass was transplanted to enclosures to protect them from predators and high wave energy. Volunteers are also collecting water quality data at the transplant sites biweekly. The program also uses volunteers from Americorps. Two Americorps participants from the New Orleans Youth Action Corps have been trained to do laboratory analysis of water quality and sediments.

At this early stage, the program seems to be very successful. Transplanted

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Tapegrass has flowered and reproduced vegetatively to colonize bare waterbottoms. Anyone who has seined or pulled a dip net through a grassbed understands the tremendous diversity and abundance of aquatic life this habitat supports. For more information, please contact Clifford Kenwood, LPBF, at (504) 836-2215 or John Burns, UNO at (504) 286-7041.

Submitted by: John Burns, Jr., UNO Research Associate and Clifford Kenwood, LPBF Project Coordinator. ■



CONSTRUCTED WETLANDS AND LIVESTOCK WASTEWATER MANAGEMENT

Research around the country is continuing to show promise for the use of constructed wetlands as a secondary treatment system for removal of nutrients from lagoon wastewater. A constructed wetland is a shallow earthen pond planted with emergent aquatic plants such as cattails and bulrushes. The pond vegetation act as filters and attachment sites for microorganisms that effectively break down livestock manure. Livestock wastewater from a primary treatment system (such as a two-stage lagoon) is gravity fed into the wetland and flows continuously down a gradual slope of less than one percent. The wastewater remains in the

wetland for about nine days, allowing for contaminant removal by microbial conversion, chemical processes, and sedimentation. Treated wastewater exiting the wetland can then be recycled back into the system or be irrigated to cropland or pastureland.

Additional research is needed, however, to determine appropriate pond size and loading rates that will effectively treat animal wastewater in a manner that is environmentally sound and economically feasible. Besides the obvious water quality benefits associated with constructed wetlands, wildlife habitat is also enhanced on the farm.

For more information about the use of constructed wetlands to treat wastewater, contact my office in Baton Rouge.

Reference: Common Ground, Autumn 1995 ■



Through this means, I would like to wish all of you a very Merry Christmas and a Happy and Prosperous New Year!

For more information about any of the topics discussed in this newsletter or to obtain wetland or coastal resource-related educational information, contact your parish Louisiana Cooperative Extension Service office.

Sincerely,

A handwritten signature in cursive script that reads "Paul Coreil".

Paul Coreil, Area Agent
(Wetland and Coastal Resources)