Louisiana Natural Areas Registry Newsletter

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Louisiana Natural Areas Registry Mission is to work with landowners toward the conservation of ecologically sensitive lands in Louisiana.

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Wild Azalea

LNHP visited Kisatchie Natural Forest's Wild Azalea Seep Natural Area in Rapides Parish in early March.

Natural Areas Registry Update

by Judy Jones, Natural Areas Registry Coordinator (225) 765-2822, jjone49@lsu.edu

We are happy to announce that Louisiana Natural Areas Registry Signs have arrived and will be distributed to our registered members later this summer. The signs acknowledge current membership the in registry program, and provide contact information to others who may be interested in information or want to join the Natural Areas The sign's Program. insignia, with its lighter to darker degrees of shading, illustrates the conservation goals of the LNHP, which is to guide natural communities and species that are presently threatened. rare. or



endangered towards recovery. The statement on the sign, "Sharing Information to Guide Conservation", refers to the core mission of LNHP, which is to collect and distribute data on occurrences of imperiled elements. We can only reach those goals with the support of landowners like you. You are indeed a key part of our team! The signs are made of weather resistant plastic and have predrilled holes for easy attachment to fence posts, etc. We hope that you enjoy your signs and display them proudly!

Higher Protection an Option

Dedication is an option for those registered members that may be thinking about permanently protecting their natural areas. An owner can dedicate their area as a Natural Area Preserve by transferring the ownership to the department of Wildlife and Fisheries (LDWF) by donation, purchase, exchange, devise, or bequest. LDWF would provide for the protection, preservation, and management of the dedicated natural area preserve for present and future generations that would be declared to be at the highest, best, and most important use for the public. Please contact Patti Faulkner (225) 765-2975 if interested.

River Bend Natural Area

We acknowledge Entergy Corporation for their dedication to permanently preserve and manage their 550-acre River Bend Natural Area in West Feliciana Parish. Entergy Corporation acquired the River Bend Natural Areas Registry in 1994. Gulf States Utilities originally registered the site in 1993. Jim Monk, Forest Manager, worked with LNHP in 2004 to determine the boundary of the registry to be

permanently protected and to develop a management plan that will maintain and enhance its unique characteristics. Whiteeyed Vireo nest shown at right. River Bend Natural Area consists of two natural community types including: Southern Mesophytic Forest, and Bald Cypress-Tupelo



Swamp. River Bend Natural Area is located in an ecoregion of the state that is confined to West Feliciana Parish. This ecoregion contains the last occurrences of the southern mesophytic forest type in Louisiana. The region is known to harbor 20 state-rare plant species and 14 state-rare animals. Southern Mesophytic forests developed on deep, fertile loess deposits that lie in a landscape of high narrow ridges with steep slopes, deep ravines, and intermittently flowing streams. The topographical characteristics of the area create a relatively cool and



moist microclimate on the slopes and ravines, and thereby allowing for sustained localized populations of some characteristic Appalachian vegetation that are thought to have migrated south ahead of advancing glaciers in the last ice-age. This is the only area in the state inhabited by the Eastern Chipmunk (*Tamias striatus*) shown at left. hipmunks-chipmunks com).

(Picture from www.chipmunks-chipmunks.com).

We are acknowledging 2 new Natural Areas Registries this quarter totaling approximately 60 acres. We contacted Hunter McNeely initially about property that he owned along Black Creek in Grant Parish. Hunter informed me that the parish landowner map was incorrect but he would like to show us 2 nice areas that he owned by Lake Iatt for the Natural Areas Registry. We have registered one site already and we are happy to register Hunter's family-owned property called Sac-au-lait Lane Natural Area. We contacted Sharey Caire (Sharey's Black Creek Natural Area) about surveying her property along Black Creek in Grant Parish for Louisiana Pearlshell mussels and we found some in waist-deep water.

Sac-au-lait Lane Natural Area is

a 40-acre mixed hardwood loblolly pine forest with little or no evidence of disturbance and good structural diversity. It is owned by members of the McNeely family:



Amanda G. Mixon, Doris M. Wellan, Hellena M. Domingue, Kenneth H. McNeely, and T. Hunter McNeely III. The forest is adjacent to latt Lake. An Osprey (*Pandion haliaetus*)

adjacent to latt Lake. An Osprey (*Pandion haliaetus carolinensis*) and the federally threatened Bald Eagle (*Haliaeetus leucocephalus*) nests are located nearby. Osprey nest shown at left. Picture of Hunter McNeely and Ines Maxit

on latt Lake after draw down stage.

Sharey's Black Creek Natural Area is a 20-acre small stream forest along Black Creek in Grant Parish. It is owned by Sharey Caire and is considered to be important habitat for the state endangered Louisiana Pearlshell mussel (Margaritifera hembeli). One of the largest Louisiana Pearlshell



mussel beds lies upstream of Sharey's Black Creek Natural Area.

Louisiana Community Information Marine Subtidal Open Water: Marine Deepwater

By LNHP and Judy Jones

The Marine System consists of the open Gulf of Mexico overlying the continental shelf and its associated high-energy coastline. Marine habitats are exposed to the waves and currents of the open Gulf and the water regimes are determined by the ebb and flow of the tides. Salinities may exceed 30 parts per thousand, with little or no dilution except outside the mouths of estuaries (where river currents are met by the tides). Shallow coastal indentations or bays without appreciable freshwater inflow are also considered part of the Marine System because they generally support typical marine biota.

The Marine System extends from the outer edge of the continental shelf shoreward to one of three lines:

- 1) Landward limit of tidal inundation (extreme high water of spring tides), including the splash zone of breaking waves.
- 2) Seaward limit of wetland emergents, trees, or shrubs.
- 3) Seaward limit of the Estuarine System, where this limit is determined by factors other than vegetation.

The distribution of plants and animals in the Marine System primarily reflects differences in several factors:

- 1) The degree of exposure of the site to waves.
- 2) The texture and physiochemical nature of the substrate or soil.
- 3) The amplitude or height of the tides.

4) The latitude, which governs water temperature, and the intensity and duration of solar radiation.

There are 3 main Natural Communities that are considered as part of the Marine System with sub-communities, and these are:

- A. Marine Subtidal Open Water
 - (Open water bodies with high wave energy)
 - A) Marine Deepwater (Gulf)
 - B) Shallow Water
- B. Marine Intertidal Beach/Bar

(Unconsolidated shore consisting of wave reworked materials on the mainland or the gulfward side of barrier islands.

1) Intertidal Sand/Mud/Shell Beach/Bar

C. Marine Aquatic Bed

(An aquatic bed of varying species composition in a marine water body)

- 1) Submergent Algal Vegetation
- 2) Submergent Vascular Vegetation

Our focus will be on the Marine Deepwater (Gulf) community. Waters of this community are relatively deep and are a permanently inundated subtidal zone. The bottom consists of either a compact (consolidated) or free (unconsolidated) mass of sand, mud, sediments, shells and other non-living detritus. There is not much biological diversity on the bottom of this community and it may be because sunlight is greatly diffused before reaching lower depths. Light/depth relationship is probably variable from site to site and may be linked to climate and oceanic phenomena. Some plant life in the form of benthic macrophytes (tiny plants living on bottom of gulf) may be present. The Marine Deepwater community grades gulfward into an oceanic benthos (sea bottom), and landward into an unconsolidated (free mass) marine bottom.

Associated Marine Deepwater Community Animals

The LNHP lists ten rare / threatened / and endangered animals that inhabit the deepwater marine community. Of these, four are mammals (Blue Whale, Finback Whale, Sei Whale, and Sperm Whale), five are turtles (Green Sea Turtle, Hawksbill Sea Turtle, Kemp's Ridley Sea Turtle, Leatherback Sea Turtle, and Loggerhead Sea Turtle), and one is a fish (Gulf Sturgeon). Sightings reported to LNHP are added to the LNHP database. LNHP data is applied to land use decisions, environmental impact assessment, resource management, conservation planning, endangered species review, research and education. LNHP's work has also expanded beyond inventory to include research on threatened and endangered species and involvement in diverse conservation issues concerning non-game wildlife species and plants.

Whales: Introduction

Cetaceans – Whales, Dolphins, and porpoises are perhaps the most specialized of all mammals, with their fish-shaped, hairless body, flipper-like front limbs, and vestigial back limbs (located within the body wall). However, they are true mammals: they breathe air with lungs, and they have mammary glands with which they suckle their young. Cetaceans, which can be divided into baleen whales (such as the Blue Whale) and toothed whales (such as Dolphins, Porpoises, and Sperm Whales), are found throughout the world's seas, and some species live in tropical and subtropical rivers. Many species, including the blue whale, have been hunted in such numbers that they are in danger of extinction.

Cetaceans have a hairless, streamlined body to reduce water turbulence. External projections are reduced to the essentials: flippers for steering, a tail with 2 boneless, horizontal flukes (fish have vertical flukes), and usually a dorsal fin for stability. Even the genitals are concealed within folds. Other adaptations to underwater life include a thick layer of

blubber (fat and oil) beneath the skin that conserves body heat, and light, spongy, oil-filled bones. Cetaceans breathe through one (toothed whales) or 2 (baleen whales) blowholes – muscular nostrils usually situated on top of the head. Toothed whales have a brain that is relatively as large as that of primates, and they are known for their intelligence. Baleen whales have a relatively smaller brain. Cetaceans have no sense of smell, excellent vision up to 3-1/2 feet underwater with limited color vision, and extraordinarily sensitive hearing. Members of the toothed whale group produce high-frequency clicks for echolocation and can also communicate using a wide range of sounds audible to humans. Other cetaceans employ a variety of vocalizations, but these are less well studies.



Some major differences between fishes and cetaceans: (A) a shark; (B) a toothed whale or dolphin; (C) head of a baleen whale.

Finback Whale Balaenoptera physalus



© Larry Foster, Earth Views Federal Status: Endangered (June 2, 1970) State Status: Endangered (December 20, 1989)

Description: This species is second only to the blue whale in size and weight. The Finback Whale has a dark gray or brownish back, a light underside to its tail, and unmarked sides. The color pattern of the head is similar to that of the body but rotated about 90 degrees to the left where the right lower jaw, anterior right baleen plates, and right side of tongue are white. This characteristic distinguishes this whale from all other whales.

The Finback Whale has a ridge that runs along the top of its head from its blowholes to the tip of its snout. Ventral grooves extend to midpoint of body Dorsal fin is about 23.6 inches tall, angled steeply backward, located posterior to the midpoint of the

body. Adults may reach 78.7 feet in total length; females slightly larger than males.

Finback Whales are most similar in appearance to the Blue Whale. They are distinguished from that species on the basis of head shape (V-shaped snout versus Blue's broader U-shape snout), baleen color (gray to white versus Blue's black baleen), dorsal fin size (Blues smaller dorsal fin located toward posterior), and skin color (dark gray to brownish back and white underside versus Blue's mottled blue-gray body).

Finback Whales normally travels in small groups of 6 to 15 individuals, but congregations of 100 or more have been reported at favorite foraging areas. They generally inhabit waters between the shore and the 1000-fathom curve.

Finback Whales reach maturity at 6 to 7 years of age. Mating and calving occurs during November through March. Females can produce one calf every 2 to 3 years.

Diet includes pelagic crustaceans and fish.

Distribution: Finback Whales are found in all oceans and seas, including polar waters, during the summer. They are present in the Gulf of Mexico throughout the year and these whales may form a somewhat isolated population. There are 4 stranding records from Louisiana, all from the southeast coast.

Reason for decline: Over harvest.

Conservation efforts: (1) Monitoring of world's population (2) Determining degree of inter-mingling of various populations.

Other Species of whales that have been seen off the shores of Louisiana are the **Blue Whale** (*Balaenoptera musculus*), **Sei Whale** (*Balaenoptera borealis*), and the **Sperm Whale** (*Physeter macrocephalus*). More on these species can be found on Louisiana Natural Heritage Program web site.

Sea Turtles Introduction

Tortoises and Turtles are among the oldest of all living reptiles. They first appeared about 200 million years ago but have evolved little in the intervening time, so that the living species are remarkably similar to those that lived side by side with such animals as dinosaurs. Their most distinctive feature is the hard shell that encloses the soft parts of the body, providing protection and camouflage from predators and the elements. Tortoises and turtles have no teeth and instead use sharp jaws to cut their food. They live on land as well as in freshwater and marine habitats (although all species lay their eggs on land). The terrestrial species are commonly referred to as tortoises, while those that live in freshwater are often called terrapins. The term turtle was traditionally reserved for marine species, but most zoologists now use it to refer to all members of the order. Although they are most common in tropical regions, tortoises and turtles are also found in temperate parts of the world. Some marine species undertake long-distance migrations, either in search of food or to reach their nest sites.

All tortoises and turtles have a shell, 4 limbs, and a horny, toothless beak in their jaw. The shell consists of upper and lower parts (known as the carapace and plastron respectively), joined between the front and back legs on each side by a bridge. All parts of the shell have 2 layers: an underlying bony layer and an outer epidermal layer. The outer layer is made of thin, horny plates (scutes), which contain the pigment that gives each species its distinctive coloration. Some species lack scutes and have soft, leathery shells. The shape of the limbs differs between terrestrial and aquatic species: most terrestrial species have short, club-shaped legs; while in aquatic species they are either webbed or shaped like flippers. Since their ribs are fused to the shell, tortoises and turtles cannot move their ribs to draw air into and out of their lungs. Instead, they use muscles at the

tops of their legs to provide the necessary pumping action. The shape of a tortoise or turtle's shell reflects its way of life. Terrestrial species have a high, domed shell that is difficult for predators to bite or crush. Aquatic species have a low, streamlined carapace that helps them slip easily through water.



Structural features of turtles: carapace scutes, and plastron scutes.

Kemp's Ridley Sea Turtle Lepidochelys kempii



Bill Reeves, TWPD

Federal Status: Endangered (December 2, 1970)

State Status: Endangered (December 20, 1989)

Description: Kemp's Ridley Sea Turtles are the only sea turtle with an almost circular carapace. The carapace varies in color and may be dark gray, brown, black, or olive. Distinguishing features are 2 pairs of prefrontal scales; **5** or more costal scutes, with the first pair touching the nuchal; and 4 (rarely 5) large scutes on the bridge, each with a pore on the posterior edge. They have **1** claw on front flippers and **1** or **2** on rear flippers. Ridleys are the smallest sea turtles, weighing 80 to 100 lbs with a carapace 20 to 28 inches in length. Large individuals may

have a shell up to 30 inches in length.

Kemp's Ridleys prefer sheltered areas along the coast, such as bays, bayous, and estuaries, during the non-nesting period. They are apparently mostly bottom feeders.

Females lay several hundred eggs during the nesting season and may nest every year, unlike other sea turtles. Although



this species does not nest in Louisiana, the estuarine and offshore waters of Louisiana may afford key feeding and developmental sites. In addition, some of the deepwater channels and estuaries in Louisiana may provide important hibernation sites.

Diet: Kemp's Ridleys eat a variety of aquatic animals such as crustaceans, mollusks, fish, jellyfish, squid, and starfish.

Habitat: Kemp's Ridleys inhabit warm bays and coastal waters; tidal rivers; estuaries; sea grass beds; sandy coastal beaches are used for nesting.

Distribution: Kemp's Ridleys are primarily restricted to the Gulf of Mexico, although juveniles may be carried in the Gulf Stream into the Atlantic as far as New England and Europe. Most nesting is restricted to a narrow stretch of beach near Rancho Nuevo, Tamaulipas, Mexico, although there are occasional nesting attempts in southern Texas and other regions in Mexico. The number of nesting females has declined from an estimated 42,000 observed on a single day in the 1940's to 621 in the entire year of 1982. This is the most endangered of the sea turtles and one of the world's most endangered vertebrates. Next to the loggerhead, this is the most commonly encountered sea turtle in Louisiana.

Reasons for decline: Intense exploitation of Kemp's ridley eggs was undoubtedly the most important cause of the decline. Of secondary importance was the harvest of adults for food and incidental catch in fishing gear. Little recovery in spite of protective measures for past 15 years. Shrimping trawls drown all life stages, especially immature individuals.

Conservation efforts: The Rancho Nuevo beach has been given full protection from disturbances. Shrimpers are now required to use turtle exclusion devises (TEDs) to reduce unintentional drowning in trawls. Additionally, a Headstart program was initiated in Galveston, Texas to hatch the eggs from Rancho Nuevo, rear the hatchlings to early juveniles, and release them in the deep Gulf waters. This program was an attempt to get the turtles to nest on the beach at Padre Island, Texas. The project has recently been stopped due to a lack of funding. The species' numbers are slowly increasing. Over 3,600 nests were documented in 1998 with 13 of these on Padre Island, Texas."

Other Species of turtles that have been seen off the shores of Louisiana are the Green Sea Turtle (*Chelonia mydas*), Hawksbill Sea Turtle (*Eretmochelys* imbricata), Loggerhead Sea Turtle (*Caretta caretta*), and the Leatherback Sea Turtle (*Dermochelys coriacea*). More on these species can be found on Louisiana Natural Heritage Program web site.

Gulf Sturgeon Acipenser oxyrhinchus desotoi



Federal status: Threatened (September 30, 1991) State status: Threatened (August 20, 1992)

Sturgeons are an ancient fish, harkening back 350 million years. While the sturgeon were among the first bony fishes, as they evolved, their internal bone structure gave way to cartilage. However, they have an external bony armor called scutes - razor sharp plates. The Gulf sturgeon is a subspecies that evolved from the Atlantic sturgeon when it became marooned in the Gulf of Mexico during the last ice age.

Description: Gulf Sturgeons are large, primitive fish that are a relatively stocky cylindrical fish. They have an elongated, wedge-shaped head and four fleshy barbels in front of the mouth that are positioned on the underside of the head. Gulf Sturgeons have five rows of bony plates on each side with a prominent dorsal ridge. The tail fin is 2- lobed and upper lobe is the longest. A spiracle is just above each eye. They are light to dark brown above and pale below. Adult Gulf Sturgeons usually range between 6 to 8 ft in total length and may weigh as much as 160 lbs.

Gulf Sturgeons are anadromous (breeds in fresh water, then returns to salt water). They mature between 10 and 28 years of age, and may live 60 years.

Spawning occurs between late winter and early spring in major rivers. A female may lay as many as 25 million eggs during the spawning season. The young descend to the Gulf at about 4 years of age and may wander up to 930 miles from the natal stream before returning to spawn.

Diet: Gulf sturgeons are bottom feeders and primary prey items include insects, crustaceans, mollusks, annelids (segmented worms, such as earthworms), and small fishes.

Habitat: All saltwater habitats during the non-breeding period and major rivers that empty into the Gulf of Mexico during the spawning season.

Distribution: This species consists of 2 recognized subspecies, A. o. oxyrhynchus, which ranges from Labrador to northeastern Florida, and A. o. desotoi, which is found from the Mississippi River delta east to Suwannee River, Florida. In Louisiana, most records of the Gulf sturgeon have been in the Pearl, Bogue Chitto and Tchefuncte rivers in St. Tammany and Washington parishes. It is likely to be found in any large river in the Lake Pontchartrain drainage. Gulf Sturgeons were once abundant in most major rivers of the Gulf region and supported a major fishery at the turn of the century. Although accurate data are lacking, current numbers are certainly but a small fraction of historic levels.

Reasons for decline: Harvest of adults for meat and eggs (caviar) has been the principle cause of the decline. Habitat alteration, especially the constructions of dams, limits access the spawning areas. Continued modification of rivers by constructing dams or dredging affects habitat quality and availability. Incidental catch in trammel and gill nets may be the single most important threat.

Conservation efforts: Gulf Sturgeons are currently protected from harvest throughout its range. River modification must take into account affects on sturgeon. The use of TEDs (turtle exclusion devices) on shrimp trawls may reduce incidental catch. Studies are underway to determine the status, distribution, and movements of this species in Louisiana.

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Conservation Programs

The following is a list of state, federal, and private conservation programs that are available to private landowners. Some programs provide cost-share funds for improvements to properties such as prescribed burning to maintain pineland and prairie habitats, and herbicides for control or eradication of invasive species. Feel free to contact LNHP for more information.

Louisiana Forestry Productivity Program (FPP) - LA Dept of Agriculture and Forestry (LDAF), Provides financial assistance to eligible landowners for establishing and improving a crop of trees, Maximum payment annually \$10,000, Headquarters in Districts 1 - 10 and Lafayette. Bob Odom (225) 925-4500, http://www.ldaf.state.la.us/divisions/forestry/forestmanagement/forestry-productivity-program.asp

Conservation Reserve Program (CRP) – United States Department of Agriculture (USDA), targets marginal pastureland, available to agricultural producers to help them safeguard environmentally sensitive land, Provides participants with rental payments and cost share assistance, contact local USDA Farm Service Agency (FSA) or (318) 473-7734, http://www.fsa.usda.gov/dafp/cepd/crp.htm

Environmental Quality Incentives Program (EQIP) – lands in livestock or agricultural production, Establish native species, riparian buffers, herbaceous transition zone to provide good wildlife habitat, \$10,000 per fiscal year, cost-share up to 75 % establishment, sign up at FSA, <u>http://www.nrcs.usda.gov/programs/eqip/</u>

Wildlife Habitat Incentives Program (WHIP) – all land not enrolled in other USDA programs, management or restoration of upland habitat receive priority, Cost-share up to 75% establishment, sign up at Natural Resources Conservation Service (NRCS) local office, <u>http://www.nrcs.usda.gov/programs/whip/</u>

Wetlands Reserve Program (WRP) – agricultural land containing restorable wetlands, pays 75 % restoration, easements – 75 to 100 % restoration cost and easement payments, sign up local NRCS office, <u>http://www.nrcs.usda.gov/programs/wrp/</u>

Forest Stewardship Program - assists private forest landowners to more actively manage their forest and related resources, recognizes and rewards landowners making valuable contribution to LA and USA, Cody Cedotal (225) 765-2354, <u>cedotal c@wlf.state.la.us/divisions/forestry/forestmanagement/forest-stewardship-program.asp</u>

Partners for Fish and Wildlife - USFWS, technical and/or financial assistance for habitat restoration, Andy Dolan (337) 291-3100, <u>http://partners/fws/gov/</u>

Forest Health and Protection (FLEP) - LA Dept of Agriculture and Forestry (LDAF), to promote sustainable forest management practices, minimum 10 acres, cost-share payments bases on 75 % actual cost, Louisiana Natural Heritage Program contact - Patti Faulkner (225) 765-2975.

Coastal Plain Conservancy - regional non-profit land trust, works with landowners to conserve and preserve natural resources, (337) 436-9401 extension 214, <u>www.coastalplain.net</u>

Hardwood Tree Initiative - restore floodplains by planting bottomland hardwood trees on private lands, participants will receive 50 % cost establishment and annual rental payment for 14 - 15 years, and technical assistant, sign up any time at FSA office, http://www.usda.gov/news/releases/2003/12/0402.htm

Farm Bill 2002 – Conservation of Private Grazing Land Program (CPGL) – Natural Resources Conservation Service (NRCS), helps owners and managers of private grazing land address natural resource

concerns, NRCS technical assistance, non-financial, <u>http://www.nrcs.usda.gov/programs/cpgl/</u>

Farm Bill 2002 – Conservation Security Program (CSP) – (NRCS), provides payments for producers who historically have practices good stewardship on their agricultural lands, and incentives for those who want to do more, entitlement program and non-competitive, 3 Tiers Maximum annual payment Tier I \$20,000, Tier II \$35,000, Tier III \$45,000, Contact NRCS, <u>http://www.mnproject.org/csp/</u>

Farm Bill 2002 – Farm and Ranch Lands Protection Program (FRPP) – helps farmers and ranchers keep their land in agriculture by providing matching funds to purchase conservation easements, NRCS, http://www.nrcs.usda.gov/programs/frpp/

Farm Bill 2002 – Grassland Reserve Program (GRP) – helps landowners and operators restore and protect grassland, rangeland, pastureland, and certain other lands, Easement (permanent or 30 yr with all sign up costs associated provided and payments for up to 10 yrs) or rental agreement (10-yr, 15-yr, 20-yr, 30-yr at 75% of grazing value) with NRCS or FSA at any time, NRCS or FSA, <u>http://www.nrcs.usda.gov/programs/GRP/</u>

Ducks Unlimited of Louisiana - contact Hugh Bateman (318) 340-1020 or <u>hbateman@ducks.org</u>, <u>http://www.ducks.org/conservation/</u> Projects/Southern/ LAConservationPrograms.asp

The Nature Conservancy – Conservation Easements – protects land for future generations while allowing owners to retain many private property rights and to live on and use their land, at the same time potentially providing them with tax benefits, (225) 338-1040, lafo@tnc.org, http://nature.org/

Private Stewardship Grants Program – provides grants and other assistance on a competitive basis to individuals and groups engaged in local, private, and voluntary conservation efforts that benefit federally listed, proposed, or candidate species, or other at-risk species. A 10% match or through in-kind contributions is required. Contact Regional office of USFWS, <u>http://www.fedgrants.gov/Applicants/DOI/FWS/ES/PSGP-04/Grant.html</u>

North American Wetlands Conservation Fund (NAWCF) – (USFWS), provides grant funds for wetlands conservation projects, 1:1 match of nonfederal U.S. dollars, Standard Grants proposals – David Buie (david_buie@fws.gov (301) 497-5970. Small Grants Program proposals – Keith Morehouse (keith_morehouse@fws.gov (703) 358-1888, <u>http://www.fedgrants.gov/Applicants/DOI/FWS/</u>FA/NAWCASG-04/Grant.html

The Conservation Fund – Conservation Easements – protects land for future generations while allowing owners to retain many private property rights and to live on and use their land, at the same time potentially providing them with tax benefits. Nick Dilks, <u>ndilks@conservationFunds.org</u>, (703) 908-5836.

Land Trust Alliance – "Conservation Options: A Landowner's Guide", booklet available by request at Louisiana Natural Heritage Program contact - Patti Faulkner (225) 765-2975. Booklet outlines options available for protecting land per an individual's personal situation such as 1) Want to retain title to the land 2) Want to receive compensation or 3) Want to continue to live on the land.

The Trust for Public Land (TPL) – national nonprofit organization that works with landowners, government agencies, and community groups to protect and conserve land. Assists with land trusts, communities, and states in creating and expanding sources of public funding for land conservation. Call (617) 367-6200 or www.tpl/org

Judy J. Jones - Natural Areas Registry Louisiana Dept. Wildlife and Fisheries P.O. Box 98000 Baton Rouge, LA 70898-9000