Barataria-Terrebonne National Estuary Program Tidal Graph Calendar July 2002 - June 2003



Barataria-Terrebonne National Estuary Program

Disclaimer

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the **MIGHTY Tides**

There is not one drop of water in the ocean, not even in the deepest parts of the abyss, that does not respond to the mysterious forces that create the tide. No other force that affects the sea is so strong. Compared with the tide, wind-created waves are surface movements which are felt, at the most, no more than a hundred fathoms below the surface. To help you comprehend the enormous masses of water affected by tidal movement, consider the following example. Into one small bay on the east coast of North America - Passamaquoddy - two billion tons of water are carried by the tidal current twice each day; into the whole Bay of Fundy, 100 billion tons!

Response to "Pull" of Moon

The tides are a response of the waters of the ocean to the gravitational "pull" of the moon and the more distant sun. Folks who live along the Louisiana coast know that the moon, far more than the sun, controls the tides. Why is this? Should not the sun, with a mass 27 million times that of the moon, have the great influence? No. Because in the mechanics of the universe, nearness counts far more than distant mass, and when all the mathematical calculations have been made, we find that the moon's power over the tides is more than twice that of the sun.

Moon Deciding Factor

Here's how it works - twice each month, when the moon is a mere thread of silver in the sky, and again when it is full, we have the strongest tidal movements - the highest flood tides and lowest ebb tides of the lunar month. These are called the spring tides. At these times the sun, moon, and earth are directly in line and the pull of the two heavenly bodies is added together to bring the water high on the beaches and draw a brimming tide into the bays so that boats float high beside their wharfs.

Likewise, twice each month at the quarters of the moon, when sun, moon, and earth lie at the apexes of a triangle and the pull of the sun and the moon are opposed, we have the moderate tidal movements called the neap tides. At this time the difference between high and low water is less than at any other time during the month. A simple way to explain or remember tidal rhythm is to think of it as twice-daily waves that move like the hour hand of a clock about a central point - mid ocean. These waves run 12 hours and 25 minutes apart; their crests are high tides and the troughs are low tides.

Power of Oscillation

Tides are further complicated by the fact that every body of water, whether natural or artificial, has its own period of oscillation. If disturbed, its waters will move with a seesaw or rocking motion with the most pronounced movement at the ends of the container and the least motion in the center. The truth of the matter is that local topography is allimportant in determining the features that, to our minds, make "the tide". The attractive force of the heavenly bodies sets the water in motion, but how, and how far, and how strongly it will rise depends on such things as the slope of the bottom, the depth of the channel, or the width of the bay's entrance.

When we spend a holiday or weekend at Venice, Grand Isle, or Cocodrie, the ebbing and flowing of the tide may not leave much of an impression on our minds because in that great inland sea of the Atlantic - the Gulf of Mexico - the tidal rise is but a slight movement of no more than a foot or two.

On the shores of Louisiana the tide is long, deliberate undulation - one rise and one fall in the lunar day of 24 hours plus 50 minutes - resembling the untroubled breathing of that earth monster to whom the ancient Indians attributed all tides. In contrast, if you ever have the chance to summer on the Gulf of Maine around the Bay of Fundy, the rise and fall of the tide would be something you would never forget. You would have to accommodate your boating and swimming activities to a tide that rises and falls 40 to 50 feet a day! Although all earth lies under the same moon and sun, the above contrast shows us how much the topography, or shape of a basin in a certain location, affects the tide.

Tides Growing Weaker

Let me leave you with the following fact: the tides are growing weaker and weaker. Tidal friction is constantly pushing the moon farther and farther away. As the moon recedes, it will have less power over the tides, and it will also take the moon longer to complete its orbit around the earth. When finally the length of the day and month coincide, the moon will no longer rotate relatively to the earth and there will be no lunar tides.

If the history of the earth's tides should one day be written by some observer of the universe, it would no doubt be said that they reached their greatest grandeur and power in the younger days of Earth, and that they slowly grew feebler and less imposing until one day they ceased to be. As with all that is earthly, their days are numbered. All this, of course, will require time on a scale the mind finds difficult to conceive, and before it happens, it is quite probable that the human race will have vanished from the earth.

Tides More Complicated

However, the tides are enormously more complicated than all of this would suggest. The influence of sun and moon constantly changes with the phases of the moon, with the distance of moon and sun from the earth, and with position of each in relation to its position north or south of the equator.

The declination of the moon (its position north or south of the equator) is one of the most important factors affecting Louisiana tides. As the moon revolves around the earth from east to west, it also has a north-south movement. The declination is the distance in degrees of latitude that the moon is north or south of the equator. The plane of the moon's orbit is not in the same plane as the equator; therefore, the declination of the moon is constantly changing. In the moon's fortnightly change from maximum northerly to maximum southerly declination, the difference between morning and afternoon tides are greatest near the times the moon is over the equator.

Tides Affect People, Fish

The lives of coastal Louisianians are affected daily by the tides and of even greater importance is the effect the rise and fall of the tides has on the lives of fish and shellfish we call "seafood." The tidal flooding of the coastal marshes - the estuaries - is a vital factor that accounts for the fertility that enables us to enjoy the fishing and fine seafood that we sometimes take for granted.



One of coastal Louisiana's great attractions is the diversity and abundance of our natural resources, particularly seafood. Among the plethora of mouth-watering delicacies found along the coast, and possibly the local favorite, oysters abound in our shallow water bays. Oysters are harvested from both public and private waterbottoms and constitute a significant economic resource for Louisiana and the Gulf of Mexico Coast Region. Nearly 1 million Louisiana oysters are consumed daily from an annual production of approximately 13 million pounds of oyster meat.

Oyster reefs are known as the cornerstone of the coastal ecosystem and provide feeding grounds, nursing grounds, and refuge to fish and other marine life. Oysters feed by filtering water and microscopic organisms from the surrounding waters that move over the reefs. A single oyster may move as much as 110 gallons per day of water through its shell cavity. Because of their feeding mechanism and their nonmotility, shellfish can accumulate bacterial, chemical, and naturally occurring toxins from the surrounding waters. The Louisiana Department of Health and Hospitals monitors the waters of coastal Louisiana through its Oyster Water Monitoring Program to ensure the quality of shellfish.

The Shellfish Challenge Initiative is an ecosystem restoration effort focusing on improving water quality and shellfish harvests within the Barataria and Terrebonne Basins. The Initiative highlights four priority projects meant to increase harvestable shellfish areas by 10%: (1) improving the use of marina pumpouts; (2) redirecting stormwater outfalls to adjacent marshes; (3) connecting poorly operating individual wastewater treatment systems to community-based systems; and (4) revising the shellfish relay. For more information visit the Gulf of Mexico Program website at www.gmpo.gov/pubhealth/shellfish.html.

Shellfish Challenge Initiative







Davis Pond Freshwater Diversion



Corps of Engineers, New Orleans



Coastal wetland loss has long been recognized as one of Louisiana's most pressing environmental problems. Of the numerous factors contributing to this loss, the leveeing of the Mississippi River for flood control may have had the most far-reaching impact, blocking the river's historic spring overflows and thus impeding the rush of marshsupporting fresh water, nutrients, and sediment to these coastal habitats.

The Davis Pond Freshwater Diversion Structure will imitate historic spring floods, providing a controlled flow of fresh water and nutrients from the Mississippi River into a target area in the Barataria Basin. Located on the west bank of St. Charles Parish, 2 miles below Luling, LA, Davis Pond is expected to restore former ecological conditions by combating land loss, enhancing vegetation, and improving fish and wildlife habitat. The structure will be able to divert up to 10,650 cubic feet per second (cfs) of fresh water under regulated conditions determined by monitoring basin salinities and fish and wildlife resources. The total project area comprises 10,084 acres, including the 9,200-acre ponding area.

During the next 50 years, Davis Pond will preserve about 33,000 acres of marsh and benefit 777,000 acres of marshes and bays. These habitats support a bountiful oyster crop each year, and they provide important nursery habitat for shrimp and fish. Similarly, the marsh provides food and nesting habitat for fur-bearing animals and migratory waterfowl. By improving existing marsh conditions, the project is expected to provide average annual benefits of \$15 million for fish and wildlife, plus \$300,000 for recreation.

Senator Breaux hailed the project as a new beginning and commended those who are committed to restoring the coast of Louisiana. "We're restoring to the Mississippi River its ability to flood. But we will control that flooding in a positive sense to rebuild our state." For more information on Davis Pond visit the web site.

www.mvn.usace.army.mil/pao/dpond/davispond.htm or www.lacoast.gov.





plan your fishing trip

Louisiana Department of Wildlife and Fisheries Programs and regulations that this agency is responsible for including fishing regulations, seasons, licenses, artificial reef program, State fish records, and fishing news...... US Geological Survey's Hydrowatch Program Water related data for many sites across Louisiana including specific parameters for the last 7 days and real-time information on salinity, water temperature, stage, wind direction, wind spead, etc......www1dlabrg.er.usgs.gov US Geological Survey's Water Resources Program Data presented as a graph over a 7-day period including stage, flow rate, discharge, salinity, rainfall, and other parameters..... water.usgs.gov/nwis National Oceanic and Atmospheric Administration's National Data Buoy Center NOAA's data buoys located in the Gulf of Mexico provide historical data and real-time information on wind speed, wind direction, tidal information, and other reference information updated every hour and available for the

National Marine Fisheries Service's Southeast Regional Office

Programs and regulations pertinent to the Gulf of Mexico region and the Federal waters off the coast of Louisiana includes the opening and closing of certain fishery seasons, fisheries data, and emergency rules.......**caldera.sero.nmfs.gov**

Gulf of Mexico Fishery Management Council

Susie Mille

September 2002

Sunday Monday Tuesday Wednesday Thursday Friday Saturday



The Kemp's Ridley is one of the smallest sea turtles, with adults reaching about 2 feet in length and weighing up to 100 pounds. The adults are oval in shape and are usually olivegray in color while hatchlings are black on both sides. The Kemp's Ridley is a shallow water bottom feeder with a diet consisting mainly of crabs. While only one of five sea turtles found in the Gulf of Mexico region, it is the most seriously endangered of all sea turtles.

Numbers of Kemp's Ridley sea turtles have precipitously declined since 1947, when over 40,000 nesting females were estimated in a single arribada - a massive swarm of nesting females. Nesting populations of Kemp Ridley's experienced a low of 702 nests in 1985 due in part to overharvest and incidental catch; however, since the mid-1980's, the numbers of nests laid in a season has been steadily increasing. During the 1999 and 2000 nesting seasons, more than 3,600 nests and 6,000 nests, respectively, were deposited on Mexico beaches.

Nesting of Kemp's Ridley occurs from April to June during which time the turtles appear off the Tamaulipas and Veracruz coasts of Mexico and to a lesser extent along the Padre Island National Seashore of Texas. Some females breed annually and nest an average of 1 to 4 times in a season with clutch sizes averaging 110 eggs. Hatchlings, after leaving the nesting beach, are believed to become entrained in eddies within the Gulf of Mexico where they are

dispersed within the gulf and Atlantic Ocean by oceanic surface currents until they reach a larger size, at which time they enter coastal shallow water habitats.

Outside of nesting, the major habitat for Kemp's Ridley turtles is the nearshore and inshore waters of the northern Gulf of Mexico. Louisiana waters are especially important for migrating turtles where they can be found in salt marsh habitats and near barrier island shores.

In 1978, the United States and Mexico joined efforts to prevent the extinction of the Kemp's Ridley. Recent nesting increases are primarily due to nest protection efforts and implementation of regulations requiring the use of turtle excluder devices in commercial fishing trawls both in the United States and Mexico. Expanding the number of turtle protection camps has allowed for increased nest protection by preventing the direct harvest of adults and eggs. Due to these efforts the Kemp's Ridley appears to be in the early stages of recovery.



Recovery of the Kemp's Ridley Sea Turtle

2002

October

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Coastal Louisiana's Favorite

potted seatrout, or "speckled trout," (Cynoscion nebulosus) are the most sought after fish along Louisiana's coast, with nearly 70% of anglers surveyed saying that "specks" were their favorite fish to catch. Because they strike aggressively, thrash at the surface, occasionally jump, and are able to make short runs on light tackle, it's no wonder that this species is considered the most sought after by coastal anglers.

Being carnivorous, this predatory fish consumes smaller invertebrates, crustaceans, and small fishes while larger individuals often forage on larger croaker, menhaden, shrimp, and mullet. The life span of specks is about 7-8 years, with most becoming sexually mature at 1 year of age. While most people are familiar with the spring spawns, specks can spawn every 5 days from April through September. These fish seek out optimum salinity and temperature to begin spawning, meaning they usually spawn near the barrier islands in late May.

After spawning occurs, the eggs float and newly-hatched larvae are normally carried into coastal marshes - estuaries - by tidal action where they begin the first stages of their life. The coastal marshes of Louisiana are extremely important to the continued production and success of this species as well as a myriad of other estuarine dependent species.

Specks are not migratory in nature and rarely exceed a distance of 30 miles from where they hatch. Many specks move into the lower-salinity upper estuaries to forage during the fall and winter. During spring and summer, these fish seek the higher salinity waters of the coastal bays, passes, and barrier islands to spawn.



TROUT ALMONDINE

8 speckled trout filets 1-2 eggs beaten salt, pepper flour 1 Tbs lemon juice 3/4 stick butter 2 Tbs slivered almonds Hot cooked rice

Wash and dry filets.

Clarify butter and skim. Pour clear portion in frying pan. Set solids aside for sauce. Salt and pepper filets. Dust filets with flour and then dip into egg. Saute at medium heat until golden brown on each side. Remove filets from pan. Saute almonds in remaining butter (add additional if needed) until light brown. Add almonds and remaining butter to butter solids. Stir and add lemon to taste. Serve sauce over filets and rice.

To clarify butter: Melt butter in pan. Skim off solids from the top for sauce. Decant the clear oil to fry fish, reserve the sediment for sauce.

> COOKING WITH US AT HOME BATON ROUGE, LOUISIANA

Speck facts: The average speck is less than 2 pounds. They occasionally reach 10 pounds and can be greater than 30" long. Louisiana State record is 12.38 pounds - caught in 1950. World record is 16 pounds - caught in Virginia in 1977.

November



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Our Coastal Barriers





Most Louisiana anglers are familiar with the incredible fishing opportunities provided by the shallow water environs of barrier islands. These places are extremely productive, serving as important foraging and spawning habitat for many species of recreationally and commercially important fish and shellfish. The reasons - optimum salinity and extraordinary productivity - a result of mixing Mississippi River fresh water with the salt waters of the Gulf of Mexico.

What many Louisiana anglers may not know is the important function these islands serve in protecting our fragile marshes and coastal communities from the devastating impacts of storm driven winds and tidal flooding. Being transitory in nature, these coastal barriers endlessly shift into a variety of shapes and sizes, buffering the mainland and landward aquatic habitats from the normal scour of waves and currents and the powerful destructive force of hurricanes.

What many Louisianians should know is that our barrier islands are dying a slow death. Most beaches are eroding at an alarming rate, and some have disappeared altogether. Estimates suggest that many more of our barrier islands could disappear by the year 2020 if we do nothing to reverse this trend.

There has been much emphasis placed on the restoration of our barrier islands over the last decade. The Coast 2050 Plan, the Barataria-Terrebonne National Estuary Program's Plan, and the Coastal Wetlands Planning, Protection, and Restoration Act all address the importance of these barrier island habitats and the need to strive for their continued restoration.

Fortunately, Louisiana and the Federal government have been working to combat this problem on several fronts. In fact, several barrier island restoration projects have already been completed including restoration at these islands: Wine, East Timbalier, East, Trinity, and Raccoon. Others are still in the planning stages including restoration of Timbalier Island, Grand Terre Island, and filling in of "New Cut" between East and Trinity Islands.

Currently, the U.S. Army Corps of Engineers and the Louisiana Department of Natural Resources are conducting a feasibility study to evaluate restoration of barrier islands at a larger scale within the Barataria-Terrebonne region. It is time now for you to get involved and let your local elected officials and agency representatives know your perspective on this issue. For more information or contacts regarding this feasibility study, visit the web site www.coast2050.gov. For general information on barrier islands go to

www.marine.usgs.gov/fact-sheets/barrier.

December





Bille Crab Ghost Traps

In the coastal Louisiana landscape, it is easy to run across derelict crab traps (ghost traps) - those unused traps that litter the banks of our bayous, bays, islands, and marshes. Additionally, many ghost traps are undetectable by remaining submerged below the surface of the water. The total numbers of these traps are unknown; however, qualitative observations suggest that their numbers are very high in some areas.

Besides being an eyesore and a nuisance for unsuspecting boaters, ghost traps can continue to function by trapping many estuarine animals. Many of these animals, unable to escape, ultimately die. It has been estimated that ghost traps can continue to fish for years before they decompose altogether. Studies by the Louisiana Department of Wildlife and Fisheries suggest that an average of 25 crabs are caught by each ghost trap in a year's time. This number doesn't include the other bycatch that are incidentally captured during that same period.

There are several sources of ghost traps including inadvertent loss of traps due to storms or tidal surges; rotting of buoys, lines, or knots; intentional abandonment; and clipping of float lines by vessel propellers.

> Do your part and give active, buoyed traps a wide birth, which will help prevent potential accidents and reduce the numbers of ghost traps. Ghost trap programs that promote and encourage awareness, fishing ethics, and retrieval of unfished traps and their proper disposal is needed; however, legal issues concerning possession and transportation of crab traps must first be addressed.

> > Robert Paulsell & Coalition to Restore Coastal Louisiana

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Brown Marsh

and the Sustainability of Louisiana's Coastal Fisheries

Since the spring of 2000, large portions of Louisiana's coastal salt marsh have begun to die off at an alarmingly high rate. The phenomenon, referred to as "brown marsh", is attributed to a combination of negative climatic and environmental factors which threaten the loss of thousands of acres of coastal wetlands within a very compressed time frame. Though no immediate impacts to coastal fisheries have been documented to date, many anglers are asking, "what effect will brown marsh have on our fisheries down the road?" The answer depends on how far down the road you look - and where you look.

In the short run, some coastal fisheries could actually see a temporary increase in productivity as their supporting food chains are fertilized by a spike of organic matter supplied from rapidly deteriorating marsh. The higher salinities associated with brown marsh are also likely to accelerate the inland migration of estuarine fishes. In fact, speckled trout and red drum catches were reported for the first time ever in 1999 in the historically fresh marshes of Lake Maurepas and Lake Des Allemands.

The long-term fisheries implications of brown marsh, and coastal erosion in general, are dire. As more of Louisiana's coastal wetlands succumb to erosion, the sustainability of our coastal fisheries is threatened. Coastal marsh is analogous to the capital or principal of a bank account, where fisheries production is the corresponding interest. Long before the brown marsh crisis, Louisiana was already losing this ecological capital to the various forces of coastal land loss. From a fisheries habitat perspective, brown marsh threatens to add insult to injury. How sustainable can our coastal fisheries be when the primary driver of productivity is shifting from alluviation to deterioration? To extending the banking analogy, the question becomes – are we living off our interest, or our principal?

To find out more about "brown marsh" visit the web site <u>www.lacoast.gov.</u>

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Protecting Essential Fish Habitat

Protection of the nation's fishery resources is a function of the National Marine Fisheries Service (NMFS), an arm of the National Oceanic and Atmospheric Administration. The Magnuson-Stevens Fishery Conservation and Management Act requires that NMFS identify essential fish habitat and make conservation recommendations to other agencies whose actions could damage it. Additionally, the Act requires regulation of those fishing practices and associated gear that reduce an essential habitat's capacity to support fish and shellfish.

To implement these mandates, NMFS and the Regional Fishery Management Councils must:

- describe and identify essential habitat for all fish and shellfish stocks managed under Federal fishery management plans,
- 2. identify measures to conserve, restore, or enhance essential fish habitat in fishery management plans and amendments
- 3. recommend actions that will minimize the adverse effects of fishing on habitat.

These maps and others can be viewed on the web site below.

The new law's intent is to highlight the importance of essential fish habitat for fisheries and the need for the Councils and NMFS to take these designations into account in considering both fishing and nonfishing effects on habitat. In a few cases, however, the law could mean that fishing restrictions can be placed in areas designated as essential fish habitat.

Experience to date shows that once agencies, developers, anglers, and the commercial fishing industry understand how a proposed project may harm fish habitat, they find ways to minimize or avoid the damage. Protecting fish and fish habitat will eventually mean healthier habitats and more abundant fish stocks.

To find out more information about essential fish habitat visit the web site galveston.ssp.nmfs.gov/efh. To learn of meetings and public reviews get on the Gulf of Mexico Fishery Management Council's mailing list, call (228)875-5912.

March

"A wonderful bird is the pelican, his bill can hold more than his belly can..."

> So begins a well known limerick by Dixon Lanier Merritt that is not far from the truth. The pouch, suspended from the lower half of the pelican's long, straight bill really can hold up to three times more than the stomach.

> At 42 to 54 inches long, weighing 8 to 10 pounds, and with a 6 1/2 to 7 1/2 foot wingspan, the Louisiana State bird is the smallest member of the pelican family and one of seven species of pelican worldwide. Only the brown pelican and white pelican call Louisiana home. Easily distinguishable from one another, the brown pelican is just that brown. The white pelican is white except for the black tips on the wing.

Brown pelicans are primarily fish eaters and usually consume up to 4 pounds of fish a day. Their diet consists mainly of "rough" fish - species considered unimportant recreationally, including menhaden, herring, sheepshead, pigfish, mullet, grass minnows, top minnows, and silversides. Brown pelicans have few natural enemies. The biggest threat to

pelican survival comes from humans, although ground nests are sometimes destroyed by hurricanes, flooding, or other natural disasters. Human impact on the Louisiana State bird in the 20th century was dramatic. In the late 19th and early 20th centuries, pelicans were hunted for their feathers, which adorned women's clothing, particularly hats. During food shortages following World War I, fishermen claimed pelicans were decimating the commercial fishery resource and slaughtered them by the thousands. With the advent and widespread use of pesticides such as DDT in the mid 1900s, pelican populations plummeted because of lack of breeding success; eating DDT contaminated fish caused the pelicans to lay eggs with thin shells that would break during incubation.

It was thought that DDT caused the local extinction of brown pelicans in Louisiana in 1963. With the banning of DDT in 1972 and tight restrictions on use of other pesticides and the reintroduction efforts of the Louisiana Department of Wildlife and Fisheries between 1968 and 1980, the brown pelican has had an opportunity to again fly over the open waters and marshes of Barataria-Terrebonne. Recent estimates suggest that 159,095 young brown pelicans hatched between 1971 and 2000. Today, Louisiana's brown pelicans occur throughout their historic range and the reintroduction program is one of many success stories in Louisiana's conservation efforts.

BTNE

Recreational Size and Limits

Black Bass (Largemouth) No Size Limit • 10 Daily

Black Bass (Largemouth) Atchafalaya Basin, Lake Verret-Palourde Area 14" Minimum (TL) • 10 Daily

Striped or Hybrid Striped Bass No Limit; 2 over 30" (TL) 5 Daily

Yellow Bass No Limit 50 Daily

Fresh Water Species

White Bass No Limit 50 Daily

Crappie (Sac-a-lait) No Limit 50 Daily

Freshwater Drum (Gaspergou) 25 less than 12" (TL) No Limit Over 12"

Channel Catfish 25 less than 11" (TL) 100 Total

Flathead (Spotted, Yellow, Opelousas) Catfish 25 less than 14" TL 100 Total Blue Catfish 25 less than 12" (TL)

100 Total

April

Salt Water Species

Speckled Trout

25 Daily Redfish 16" Min. (TL); 1 Over 27'

5 Daily Black Drum

16" Min. (TL); 1 Over 27' 5 Daily

Southern Flounder No Size Limit • 10 Daily

Amberjack State and Fed. Reg. - 28" Min (FL) 1 Daily

Cobia (Ling or Lemon) State and Fed. Reg. - 33" Min (FL) 2 Daily

King Mackerel State and Fed. Reg. - 24" Min (FL) 2 Daily

Spanish Mackerel State and Fed. Reg. - 12" Min (FL) 15 Daily

Red Snapper State and Fed. Reg. - 16" Min (FL) 4 Daily

2003

Total Length First Second Dorsal Fin Dorsal Fin Pelvic Fin Anal Pore Head Trunk Tail

Fork Length (FL); Tip of snout to fork of tail Total Length (TL): Tip of snout to tip of tail

for Louisiana State Waters

Wednesday Thursday Monday Friday Saturday Tuesday Sunday 6 6 п 6 6 3(CDT) ft (CDT) 2(CDT) June 1.C 2 3 4 5 1 2 3 4 5 6 7 Tides:Barataria Pass 10 11 12 8 9 10 11 12 13 14 9 0.8 based on 13 14 15 16 17 18 19 15 16 17 18 19 20 21 0.4 Pensacola, Florida (NOAA) 20 21 22 23 24 25 26 22 23 24 25 26 27 28 29° 16N 89° 57W -0.0 29 30

Daniel Golob

Keep it 'above board'

Recycle used oil and filters, batteries and antifreeze;

Keep trash from blowing overboard; Use shore based restrooms and pumpout facilities;

Use oil absorbent materials in your bilge and for spill cleanup;

Keep detergents and bilge cleansers out of the water;

Whenever possible, do repairs and painting away from the water;

Avoid boating in shallow waters, especially those with submerged vegetation;

Each person's small efforts add up to a BIG DIFFERENCE for fish habitat!

Ala. Marine Resources Division

Barataria-Terrebonne Estuarine System

The Barataria-Terrebonne Estuarine System consists of two estuarine basins separated by Bayou Lafourche. The Terrebonne estuary lies to the west, and the Barataria estuary to the east.

Dear Friends,

Eleven years ago, the State of Louisiana made a momentous pledge to you and to the nation. As part of that pledge, the State of Louisiana and the United States of America agreed that the Barataria and Terrebonne systems, the entire area between the Mississippi and Atchafalaya Rivers, were nationally important yet critically threatened. The U.S. Environmental Protection Agency (EPA), on behalf of the U.S. government, pledged to elevate the status of this entire region to a "National Estuary". To fulfill Louisiana's portion of the pledge, representatives from business and industry, universities, local governments, Federal and State agencies, farmers, fishermen, and teachers gathered in 1991 to begin developing a comprehensive plan to restore and preserve the newly designated Barataria-Terrebonne We are heartened by the recent words of Governor Mike Foster in declaring war on erosion of this estuary and the entire Louisiana coast. We are encouraged by the Governor's public commitment because the Nation needs to know we are serious about protecting the natural treasures in our own backyards. United, we can send a clear and resounding message to the Nation: This place that we are blessed to call HOME will be defended by us all...together.

How can you help? You must first arm yourselves for the war declared by the Governor... not with guns, but with information. Educate yourselves now. Do you know what restoration efforts are being planned to protect the near-term future of your homes and communities? Do you think a high enough priority is being put on the protection of your families, your communities, your way of life, the highways you use to flee hurricanes, the places where you work, your drinking water supplies, the birds you enjoy, or the fish, crabs, and shrimp you catch? There is nothing more important than these things. And you can learn much more of the ongoing efforts to protect them.

National Estuary.

It was an ambitious and courageous endeavor. It was ambitious because the effort was going to require thousands of hours and hundreds of people working together over a 5-year period to develop a comprehensive plan. It was courageous because it represented a major change in the way we addressed the restoration and preservation of a complex natural system. The people and groups that together formed the Barataria-Terrebonne National Estuary Program (BTNEP) drove the entire plan development process through consensus.

BTNEP is now in the most important phase of its existence. We are actively implementing our comprehensive plan, taking advantage of the enormous support we have created together as a National Estuary Program. We are driven by the common desire to save a system that is disappearing before our eyes: system suffering from coastal wetland loss, degrading water quality, and adverse changes to our fish and wildlife resources. We wish to see a system capable of sustaining and protecting our homes, the places we work and play, and our way of life. Perhaps more importantly, we want these things for our children and grandchildren.

It is important for you to realize that we are all still on the losing side of this war to save the Barataria-Terrebonne Basins against the forces of subsidence and erosion. While there is certainly still hope that we will succeed, the solutions to our problems are far more costly than the current funding levels available to State and Federal restoration efforts. We must succeed... or this place that for generations has defined who we are as people, will be lost forever. Story lines provided in this calendar serve only as a place to start. For more information, visit our web site, <u>www.btnep.org</u> or call 800-259-0869. Here you will find out how to obtain free videos, brochures, CD-ROMs, and maps that address a number of ecological, economic, and cultural issues and the efforts of the Barataria-Terrebonne National Estuary Program. You will also find links to other sights that address issues such as coastal restoration, fish and wildlife management, cultural resources, education, and many more.

Join us in this struggle. Become informed. Be heard.

With Warm Regards,

The Barataria-Terrebonne National Estuary Program

