

BARATARIA-TERREBONNE
NATIONAL ESTUARY PROGRAM

2015

TIDAL GRAPH
CALENDAR





BARATARIA-TERREBONNE NATIONAL ESTUARY PROGRAM

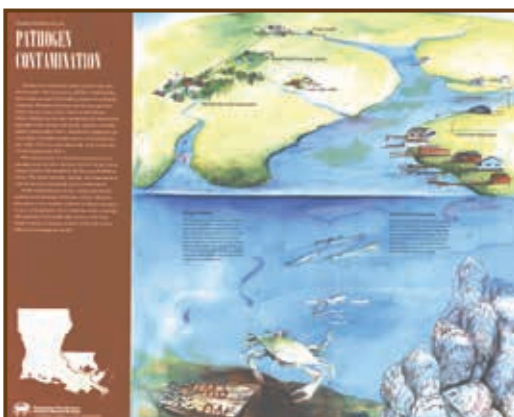


Established in 1991, the mission of the Barataria–Terrebonne National Estuary Program (BTNEP) is the preservation and restoration of the Barataria–Terrebonne estuarine system, the 4.2 million-acre region between the Atchafalaya and Mississippi River basins. BTNEP strives to rebuild and protect the estuary for future generations through the implementation of a science-based, consensus-driven plan that utilizes partnerships focused on the estuary’s rich cultural, economic and natural resources.

THE BARATARIA-TERREBONNE NATIONAL ESTUARY PROGRAM (BTNEP)

Why should we have a National Estuary Program?

Why should the nation and the Barataria and Terrebonne Basins have a National Estuary Program (NEP)? When the Environmental Protection Agency (EPA) was drafting the 1987 version of the Clean Water Act (CWA), they found that despite passage of the CWA of 1972 and requiring permits on industrial and municipal “point source” discharges, waters were still polluted, including coastal waters. Coastal waters and estuaries are highly productive areas for finfish and shellfish fisheries but are also sensitive areas. Estuaries are extensively used for oil and gas production, commercial fishing, recreational fishing, and recreation. Our estuaries were being overused. So, as part of the 1987 CWA, the EPA created the National Estuary Program. National Estuary Programs are dedicated to restoring our coastal swamps, marshes, bays and beaches so that everyone, including the birds, plants, animals and fishes can enjoy them to make a living or just for fun. When the Barataria-Terrebonne National Estuary Program (BTNEP) began, we wanted meaningful, long-term restoration that included everyone. BTNEP assembled representatives from every conceivable group or stakeholder organization that used the estuary. This included federal and state agencies along with representatives from industry and commercial and recreational fisheries, as well as environmental groups and academia. This group became the BTNEP decision-making committee or Management Conference. After identifying seven priority problems in the estuary, the best science was collected using regional experts. This scientific information was presented to the Management Conference and they collectively came up with a plan of restoration called the “Comprehensive Conservation and Management Plan” that consisted of tasks or Action Plans for restoring our estuary. So, why should we have a National Estuary Program? Because NEPs make sure that industry, fishermen, birds, animals, fish, plants and you are part of restoration. Find out today how you can help restore our Barataria-Terrebonne National Estuary at www.btnep.org.



BTNEP VOLUNTEER PROGRAM

How can you help the Louisiana Coast?

The Barataria-Terrebonne National Estuary Program (BTNEP) needs YOU!!! As a volunteer with BTNEP, you will have the opportunity to work shoulder-to-shoulder with public agency employees, engineers, scientists and decision-makers, who play a vital role in the fight to reduce coastal land loss and to restore a healthy, sustainable estuarine ecosystem. The BTNEP Volunteer Program has two goals: 1) utilize volunteers to complete coastal restoration projects and 2) educate the volunteers about issues that are central to BTNEP, such as coastal land loss and restoration. This way, the vitally needed work is completed and the volunteers leave with a great experience and knowledge about BTNEP issues to share with people back home. The BTNEP Volunteer Program annually recruits hundreds of devoted citizens from throughout the United States who offer their time and talents to help restore the estuary. The BTNEP Volunteer Program has identified projects and areas of need throughout our estuary where volunteers can help to make a difference. Work days are scheduled to provide stewardship opportunities to individuals, schools, and civic groups. Volunteer events have included habitat clean up, coastal vegetative plantings, invasive species removal, barrier island sand dune creation and maritime forest trail improvements. The BTNEP Volunteer Program has worked with its many partners to give thousands of volunteers the chance to help protect and restore the Barataria-Terrebonne National Estuary. The future holds even more promise for this growing program to continue moving forward in the important work of fostering active stewardship in our estuary communities, and performing important habitat restoration and ecological stewardship work throughout the system. For more information about volunteer opportunities or to sign up, please go to www.btnep.org.



Photos by Matt Benoit and Joe Dantin



January 2015

DECEMBER 2014

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FEBRUARY 2015

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SUNDAY

MONDAY

TUESDAY

WEDNESDAY

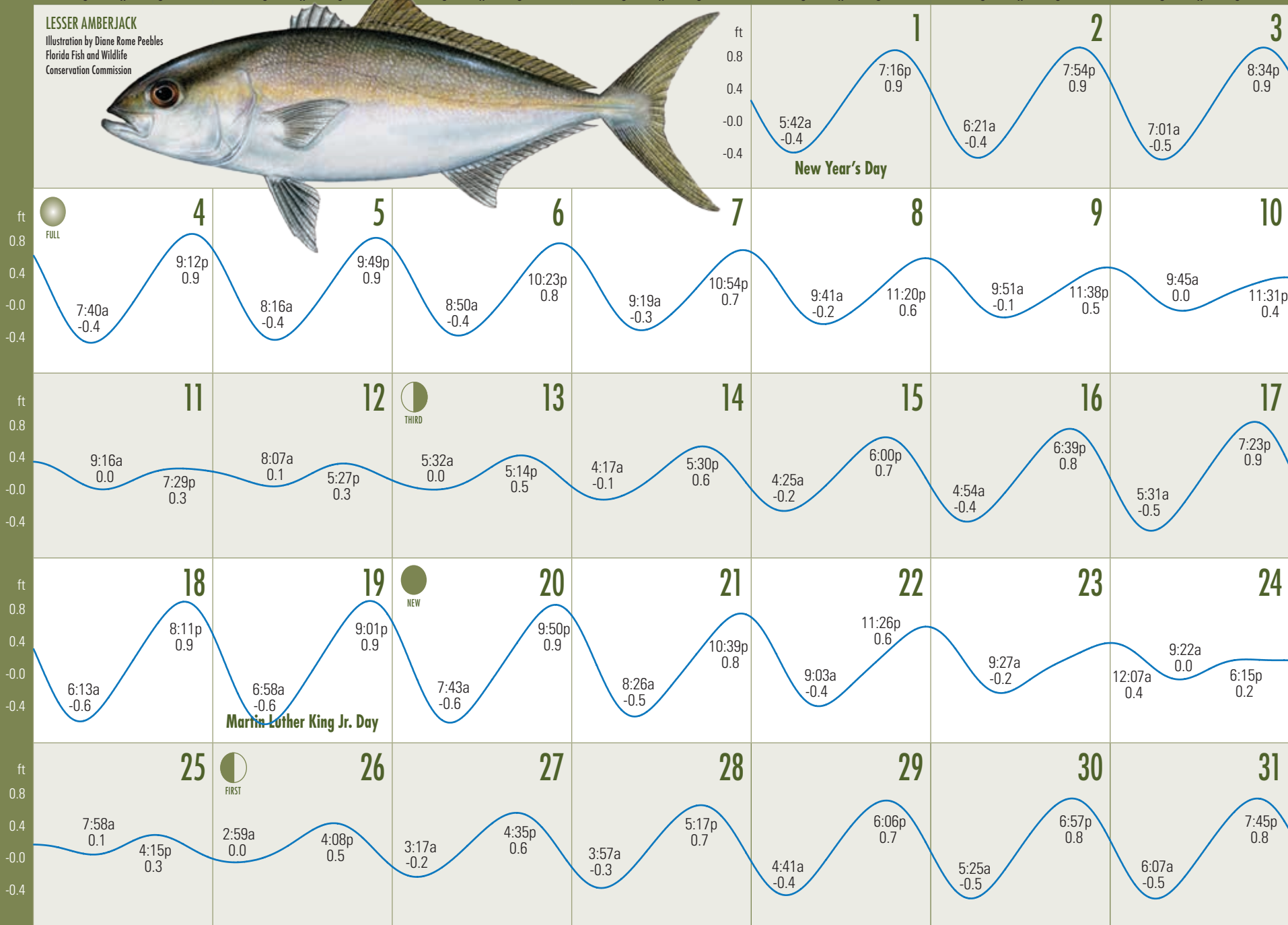
THURSDAY

FRIDAY

SATURDAY

LESSER AMBERJACK

Illustration by Diane Rome Peebles
Florida Fish and Wildlife
Conservation Commission



Invasive Species Removal, Joe Dantin

High Tide:

January 3

8:34 p.m. • 0.9 ft.

Low Tide:

January 19

6:58 a.m. • -0.6 ft.



Barataria-Terrebonne National Estuary Program:
P.O. Box 2663, NSU Campus, N. Babington Hall,
Room 105, Thibodaux, LA 70310
1.800.259.0869 • www.btnep.org

Tides from Barataria Bay, Grand Isle, East Point,
29d 15'48" N 89d 57' 24" W
Tides & Currents by Jeppesen Marine
www.nobeltec.com

Tide adjustment table can be found on the back cover



Moving Sediment with Pipeline, Koupal Communications

PIPELINE SEDIMENT DELIVERY

How can we rebuild Louisiana's disappearing coast in our lifetime?



Cutterhead Dredge, Koupal Communications

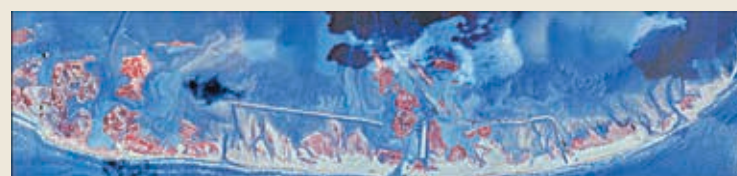
Land loss is a catastrophic problem in the Barataria-Terrebonne Estuary and there is desperate need of system-wide restoration. Fisheries, drinking water supplies, agriculture, oil and gas, and navigation are all adversely impacted. Restoration of the coast could happen in our lifetime, if we decided to invest the necessary money. We could use a Pipeline Sediment Delivery (PSD) program to rebuild coastal landforms and then sustain them with small- to medium-sized freshwater diversions. PSD harvests sediment from deposits on river bottoms and offshore areas using dredges and then pumps it long distances through pipelines to rebuild and nourish ridges, wetlands and barrier islands. Once out of the pipe, the mud settles and plants grow on the fresh sediment to create new land. Because the sediment is pumped through pipelines, there is little disruption to Louisiana industries, fisheries and

lifestyles. According to a study funded by the Louisiana Department of Natural Resources, an aggressive PSD program could restore hundreds of square miles of coastline in 50 years.* For decades, PSD has been used extensively for marsh, ridge, and barrier island restoration, and figures prominently in Louisiana's future restoration plans. The "Maritime Forest Ridge and Marsh Restoration Project" at Port Fourchon, Louisiana will rebuild over 120 acres of habitat. The "Timbalier Island Dune and Marsh Creation Project" in Terrebonne Parish, Louisiana, restored 663 acres of barrier island and bay side marshes. The "Bayou Dupont Marsh and Ridge Creation Project" in Plaquemines Parish, Louisiana, created 568 acres of new ridges and wetlands. For more information about coastal restoration projects and marsh creation, visit www.lacoast.gov. For more information about BTNEP, visit www.btnep.org.



Pumping Sediment, Koupal Communications

*2006. Phase 2 Reconnaissance-Level Evaluation of the Third Delta Conveyance Channel Project. Final Report. Prepared for the Louisiana Department of Natural Resources. CH2MHill, in association with Mussetter Engineering, Inc.



Timbalier Island before Restoration



Timbalier Island after Restoration

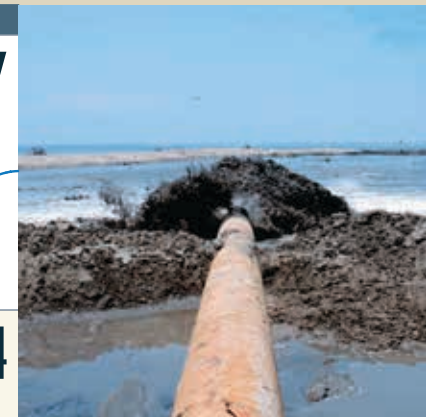
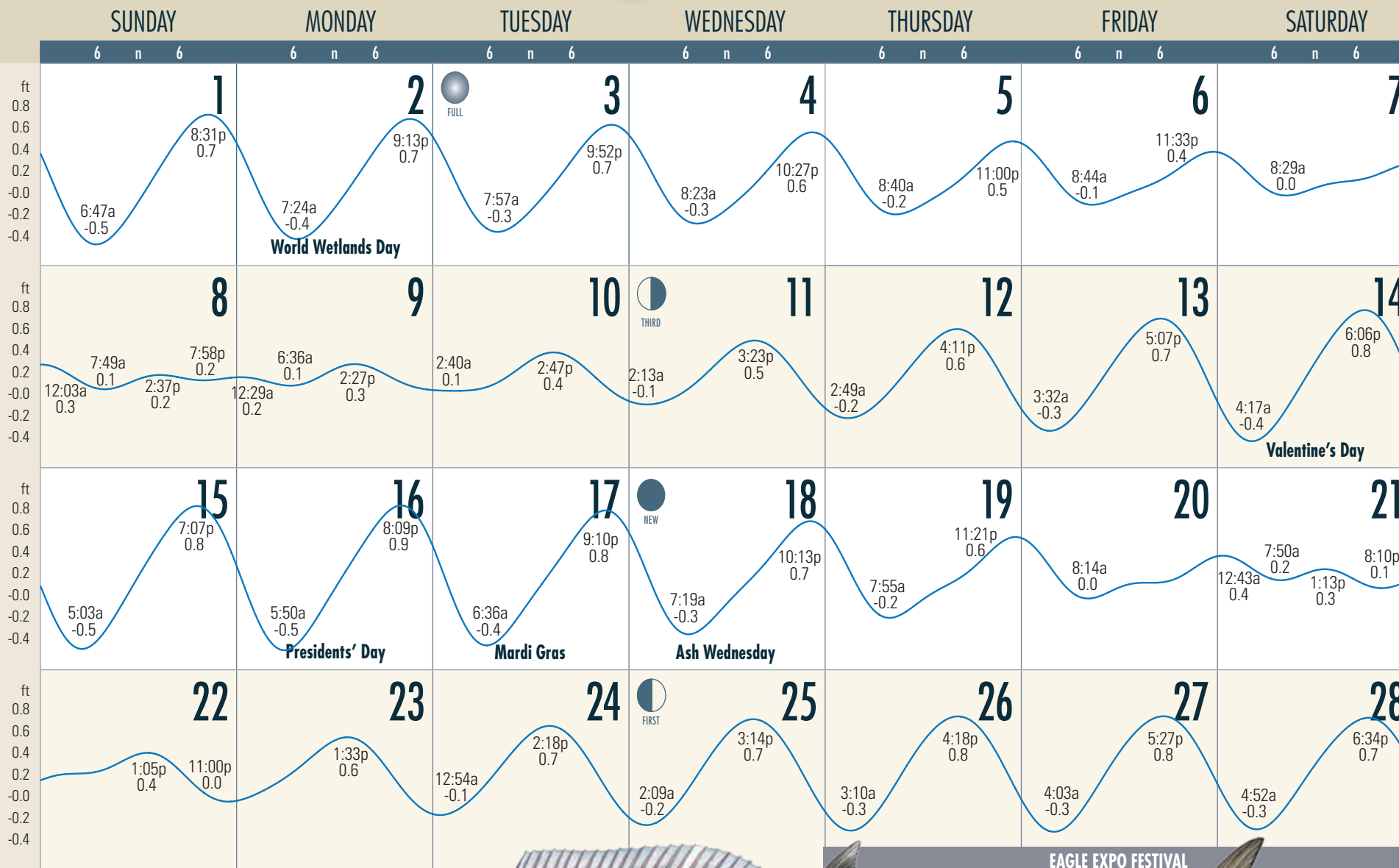
February 2015

JANUARY

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MARCH

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Piping Sediment, Koupal Communications

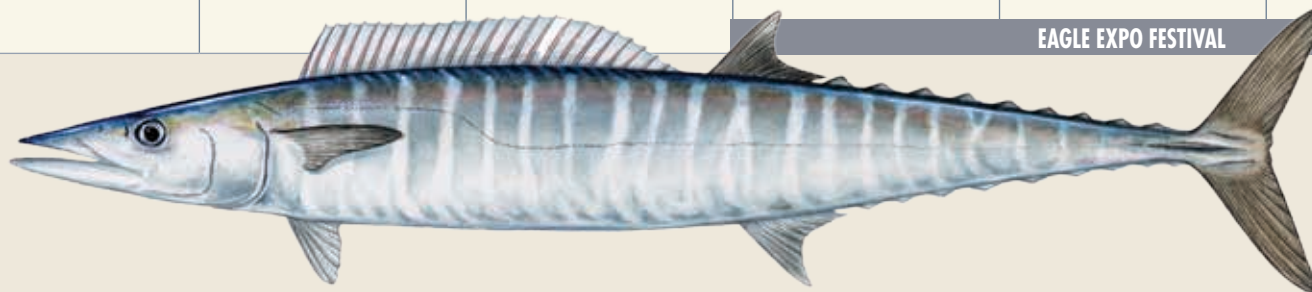
High Tide:
February 16
8:09 p.m. • 0.9 ft.

Low Tide:
February 16
5:50 a.m. • -0.5 ft.

EAGLE EXPO FESTIVAL

WAHOO

Illustration by Diane Rome Peebles
Florida Fish and Wildlife Conservation Commission



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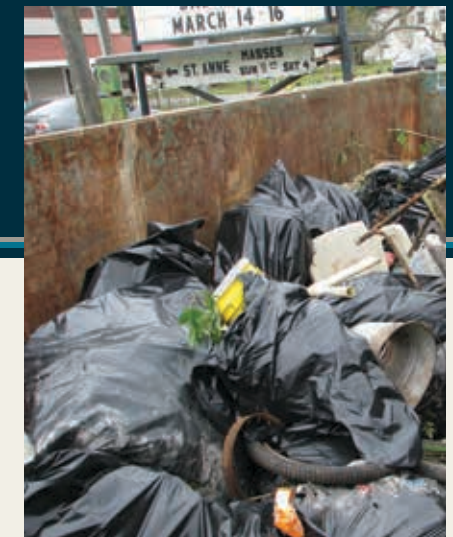
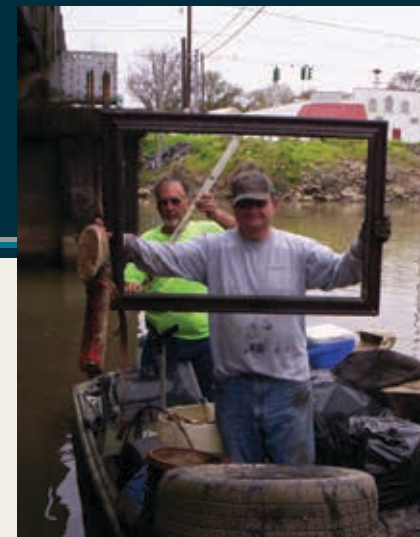
BAYOU LAFOURCHE CLEANUP

What can you do to clean up the Estuary?

As you drive down Louisiana roadways and along our scenic bayous, have you ever noticed all of the litter? What are people thinking? Litter in Louisiana is a major problem. The State of Louisiana spends \$40 million per year cleaning up litter. Not only is it unsightly, it is expensive to clean up. It causes major problems in our estuary and eventually ends up in our bayous and estuaries where it can cause flooding, endanger fisheries habitat, leach toxic substances into the water, and entangle or kill fish, birds and turtles. At BTNEP, we are working to rid the estuary of litter through annual cleanups and education. The annual Bayou Lafourche Cleanup (BLC) is a partnership between BTNEP, Keep Louisiana Beautiful, Inc. and the Bayou Lafourche Freshwater District. It is a volunteer-led event that takes place along the 106 mile-long corridor of Bayou Lafourche. Bayou Lafourche bisects our national estuary and is a historic distributary of the Mississippi River. It is the source water for industries, including Port Fourchon and drinking water for approximately 300,000 people in Assumption, Lafourche and Terrebonne Parishes. The BLC event has been a huge success in removing over 35 tons of litter from the bayou including plastic bottles, plastic bags, toilets, washing machines, ice chests, shoes, and other materials for the past 3 years. Find out how you can clean up the estuary as a volunteer at www.btnep.org.



Bayou Lafourche Cleanup, Alma Robichaux



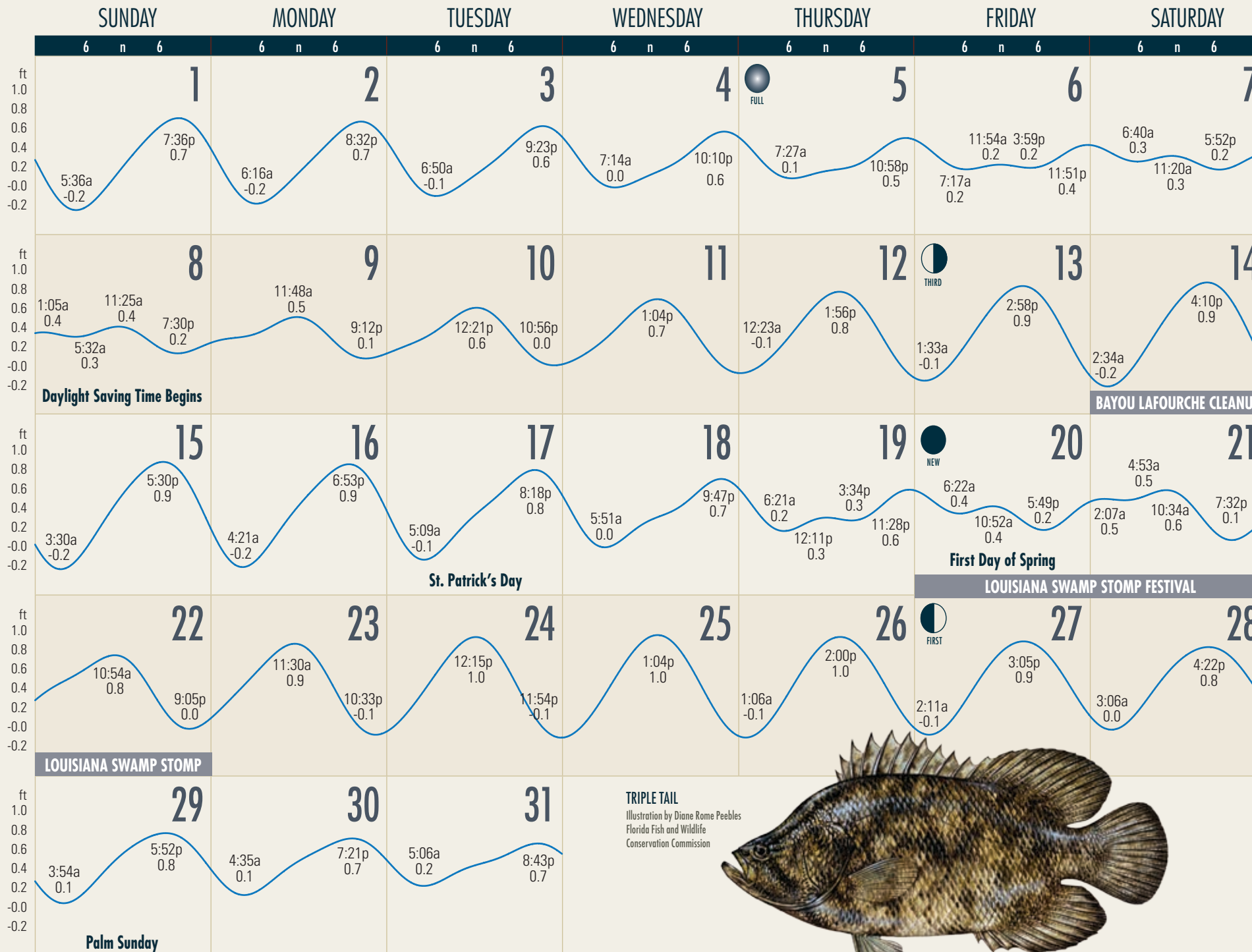
March 2015

FEBRUARY

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APRIL

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Bayou Lafourche Cleanup, Alma Robichaux

TRIPLE TAIL

Illustration by Diane Rome Peebles
Florida Fish and Wildlife
Conservation Commission



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29d 15'48" N 89d 57' 24" W
Tides & Currents by Jeppesen Marine
www.nobeltec.com

Tide adjustment table can be found on the back cover

PADDLE BAYOU LAFOURCHE

What is BTNEP doing to promote Bayou Lafourche as a natural resource?

Beginning in Donaldsonville, the 52-mile, four-day adventure down Bayou Lafourche winds its way through historic communities to Lockport, Louisiana. Paddlers can enjoy a backyard view of this ancient distributary of the Mississippi River. Bayou Lafourche has served as the region's economic corridor for centuries by providing food and transportation. Roads and highways are used today instead of the bayou. However, "Paddle Bayou Lafourche" brings people back to the bayou to reconnect them to the drinking water source for the region, the fresh water source for the lower wetlands and a great recreational experience. Paddlers choose the dates and number of days they paddle. They can also tent camp each night for the full experience. Many enjoy the sense of camaraderie and accomplishment that comes from a four-day, self-powered journey down Bayou Lafourche. During the trip, paddlers experience outstanding nightly entertainment, such as Cajun and Swamp Pop Music and a United Houma Nation pow-wow. They also learn how Bayou Lafourche requires dredging to increase flow as part of the Bayou Lafourche River Reintroduction Project. Each year of the paddle trip has been a huge success. The total yearly average is 120 paddlers and the daily average ranges from 80 to 100 paddlers. "Paddle Bayou Lafourche" has become a popular event, as paddlers from around the nation have learned to appreciate the scenic countryside, dynamic ecosystem, and unique culture of the estuary. This reaffirms the goal of "Paddle Bayou Lafourche," which is to have visitors and local citizens value Bayou Lafourche as a vital resource for the region. For more information or to support "Paddle Bayou Lafourche," please visit www.btnep.org.



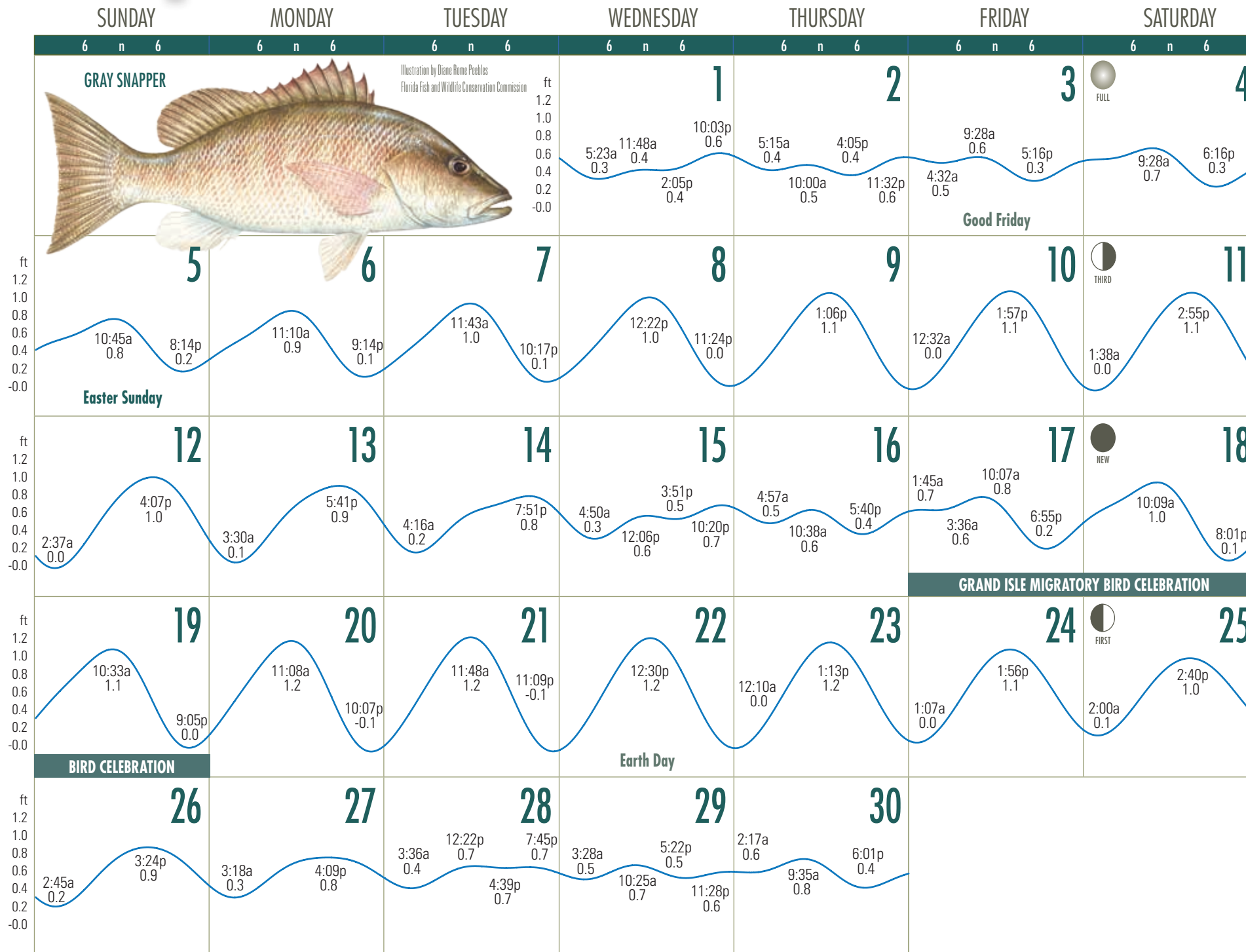
April 2015

MARCH

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MAY

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Paddle Bayou Lafourche, Delaina LeBlanc

High Tide:

April 20

11:08 a.m. • 1.2 ft.

Low Tide:

April 20

10:07 a.m. • -0.1 ft.



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FERAL HOGS

What could be worse than nutria?

Eurasian wild hogs (*Sus scrofa*) were introduced to North America in the 16th century by Spanish explorers and by hunters during the 20th century. These wild hogs bred with escaped domestic swine to create the modern scourge of hybrid feral hogs. Feral hogs have established breeding populations in at least 36 states. They tolerate a wide range of habitat types and climates, are opportunistic and omnivorous, have a high rate of reproduction, and have few native predators, so their mortality rate is low. Humans translocate hogs for hunting purposes, making the problem worse. While the majority of their diet consists of grasses, fruits and nuts, they also eat earthworms, insects, crabs, rodents, fish, amphibians and reptiles. In the coastal zone, they destroy alligator and bird nests as far seaward as the barrier shoreline. Feral hogs forage or root almost continuously, often by digging at or below the soil surface to locate food, displacing large volumes of soil. This behavior destroys native plants, facilitates exotic plant invasion and damages water quality. Coastal marshes are particularly susceptible because damage to the vegetation by rooting and wallowing leads to land loss and conversion to open water. Feral hogs probably pose a greater ecological threat than any other invasive vertebrate today. All coastal parishes in Louisiana have increasing feral hog populations. BTNEP is working with researchers at the Louisiana Department of Wildlife & Fisheries and the University of Louisiana at Monroe to use helicopters to identify sites that support feral hogs. They are now directing land owners to focus on specific areas to begin eradication efforts. Information from this project should help curtail the negative ecological impacts of feral hogs to the estuary. For more information about invasive species, visit www.btnep.org.



Feral Hog, Steve Hartley, USGS



Feral Hog, Steve Hartley, USGS



Wild Boar, Richard Bartz, Creative Commons



Feral Hog Nursing, Wikimedia Commons

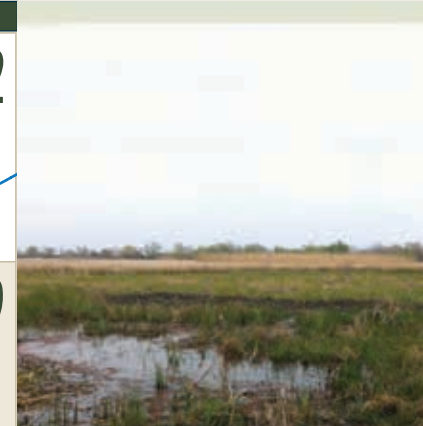
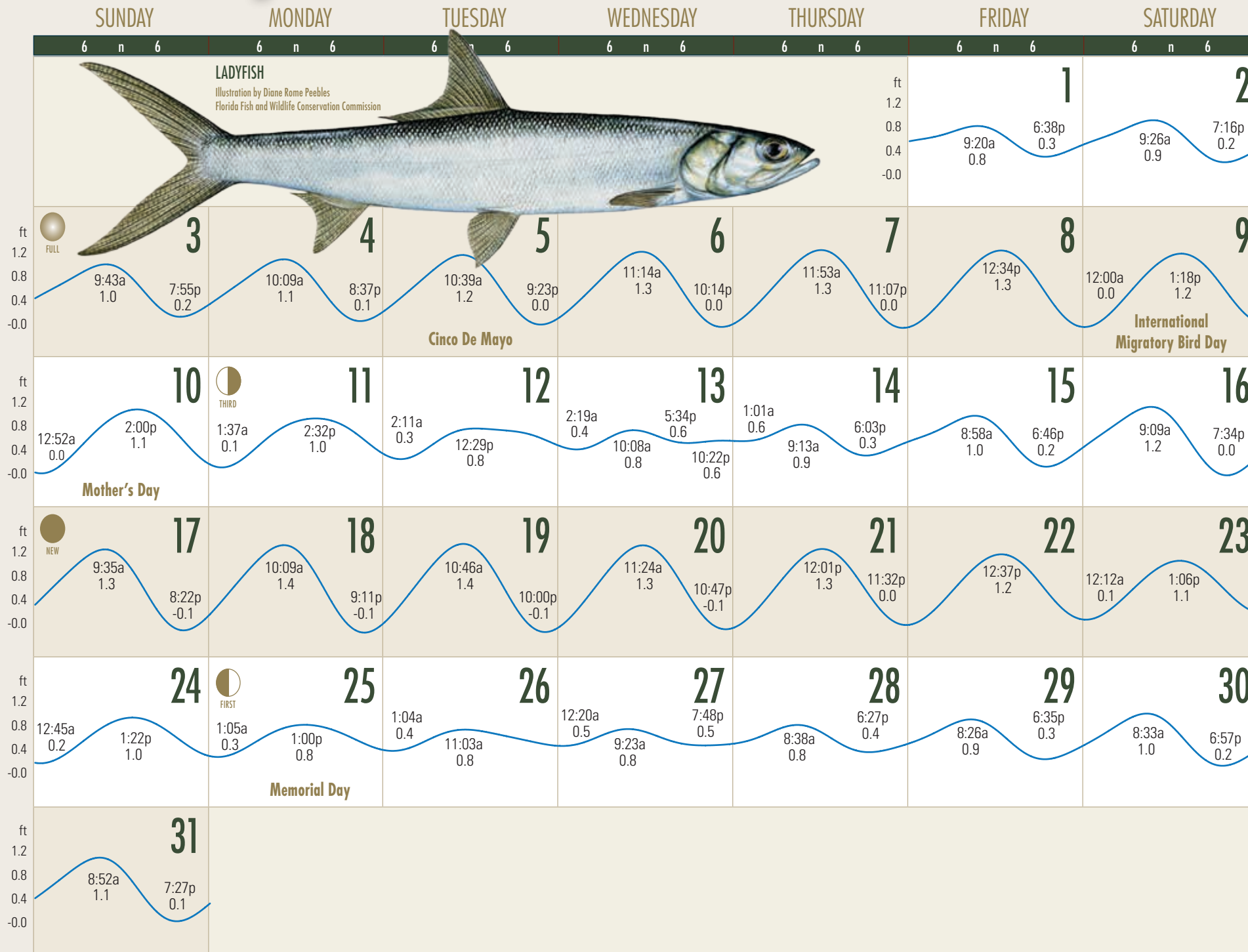
May 2015

APRIL

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JUNE

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Marsh Damage from Feral Hogs,
Steve Hartley, USGS

High Tide:
May 19
10:46 a.m. • 1.4 ft.

Low Tide:
May 18
9:11 p.m. • -0.1 ft.



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BTNEP NATIVE PLANT MATERIALS PROGRAM

What is BTNEP doing to promote and protect native species and their habitats?

The Barataria-Terrebonne National Estuary Program (BTNEP) has a huge campaign underway to restore native habitats along Louisiana's coast. In 2008, the BTNEP Native Plant Materials Program (NPMP) was developed to supply native woody species for the "Maritime Forest Ridge and Marsh Restoration project at Port Fourchon, Louisiana." Out of that effort, the program was further expanded to meet the need for woody species in coastal restoration projects throughout the entire BTNEP area. The goal of the BTNEP NPMP is to re-create natural habitats on coastal restoration projects. Species used in coastal plantings take one of two forms: woody or herbaceous species. Both groups of plants provide food, protection and habitat for migratory birds and hold soil in place, which reduces erosion and protects against storm surge. Examples of plants that we have in the BTNEP NPMP include black mangrove (*Avicennia germinans*), smooth cordgrass (*Spartina alterniflora*), salt matrimony vine (*Lycium carolinianum*), live oak (*Quercus virginiana*), red mulberry (*Morus rubra*), hackberry (*Celtis laevigata*), American beautyberry (*Callicarpa americana*), honey locust (*Gleditsia triacanthos*), wax myrtle (*Myrica cerifera*), toothache tree (*Zanthoxylum clava-herculis*), roughleaf dogwood (*Cornus drummondii*), yaupon (*Ilex vomitoria*), persimmon (*Diospyros virginiana*), and sand live oak (*Quercus geminata*). We collect, pot and grow out carefully-selected stock. To increase the survival of restoration plantings near marine environments, seeds are selected from plants growing in coastal areas. Our current facility located at the Nicholls State University Farm in Thibodaux, La, includes a 4800 square foot shadehouse, a 1500 square foot greenhouse and seven acres of flooded ponds used to grow wetland plants. Each year, thousands of woody species and tens of thousands of herbaceous species are planted within the estuary by hundreds of BTNEP volunteers. For more information, please visit www.btnep.org.

Potting Plants, Matt Benoit



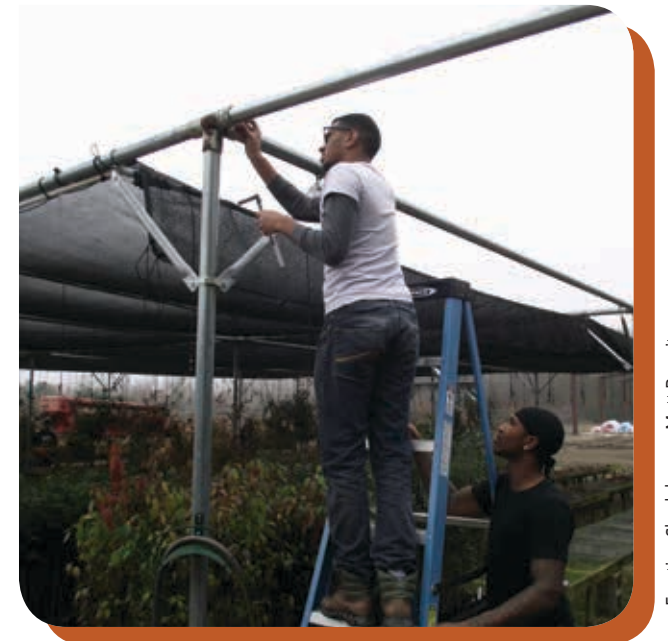
Dividing Plants, Matt Benoit



Dividing Plants, Matt Benoit

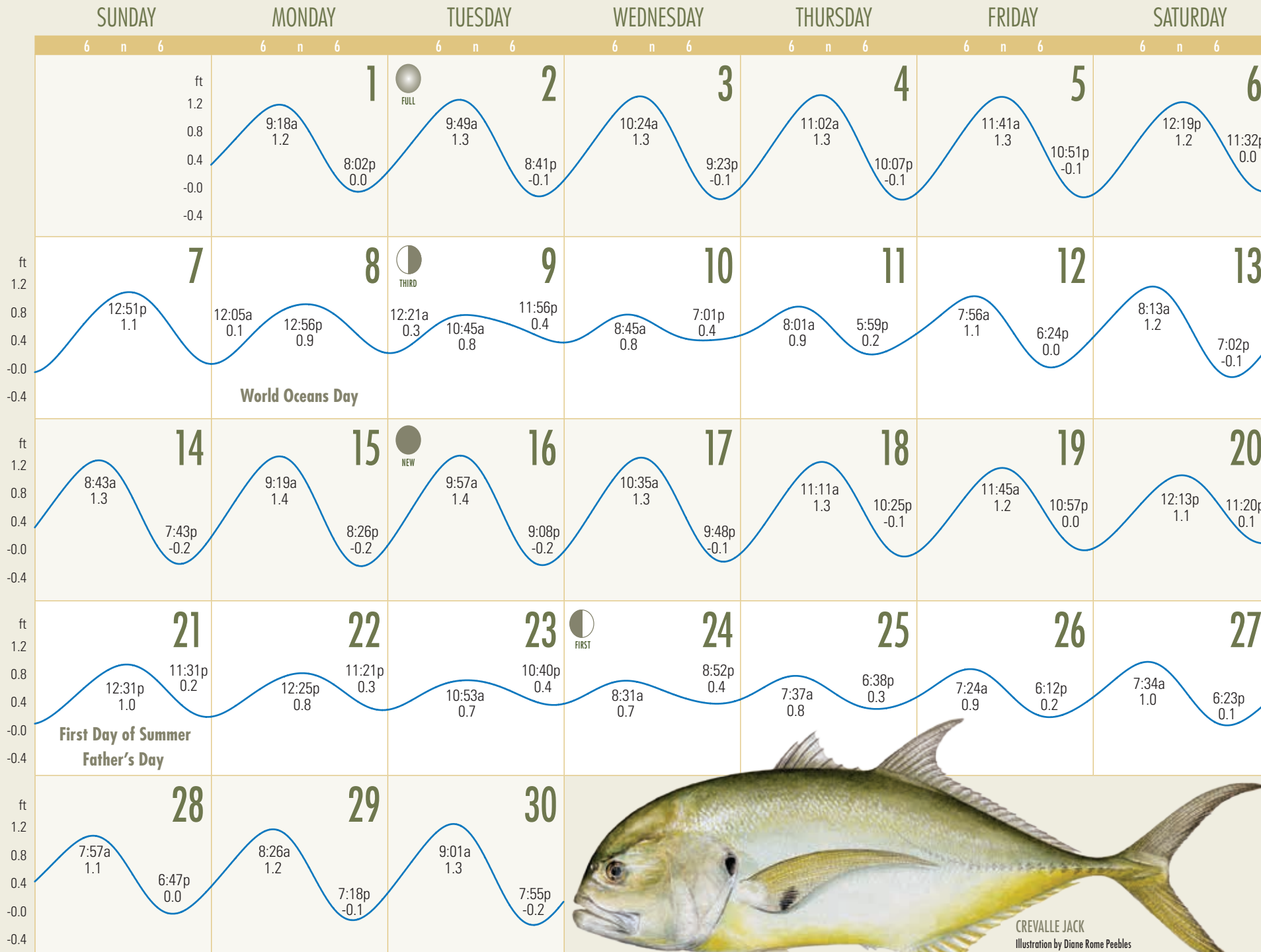


Erecting Shadehouse, Matt Benoit



June 2015

MAY							JULY						
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24	25	26	27	28	29	30	26	27	28	29	30	31	
31													



BTNEP Shadehouse, Matt Benoit

High Tide:
June 16
9:57 a.m. • 1.4 ft.

Low Tide:
June 15
8:26 p.m. • -0.2 ft.



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Measuring Water Clarity, Murt Conover, LUMCON



Titration Dissolved Oxygen, Murt Conover, LUMCON



Analyzing Data, Murt Conover, LUMCON

FROM H-2-O TEACHER TRAINING WORKSHOP AND BAYOUSIDE CLASSROOM WATER QUALITY PROGRAM

What are BTNEP and LUMCON doing to educate teachers and students about water quality?

"From H-2-O" is a content-driven, teacher training workshop held each year at LUMCON's DeFelice Marine Center in Cocodrie, Louisiana. "From H-2-O" is a partnership between BTNEP and LUMCON to further the understanding of teachers about the estuary's complex and vital water resources. This comprehensive, four-day workshop provides teachers with everything they need to implement the Bayouside Classroom Program. Bayouside Classroom (BC) is LUMCON's on-going student-based water monitoring network throughout Louisiana. This program uses water sampling to teach students about water quality from a scientist's perspective. Students gain the confidence in their understanding of the scientific method that only a hands-on approach can give them. Water bodies adjacent to their school become the students' outdoor classroom and experimental laboratory. The BC Program is a unique opportunity for educators and students to work together as a team to monitor the health of the waterways within their watersheds. Together they investigate how they are connected through water to people who live in other areas of the watershed and to the Gulf of Mexico. BC promotes stewardship so that each student will be better able to make informed decisions about the environment. Teachers who attend the "From H-2-O" workshop leave with a greater understanding of water quality and the skills needed to use all aspects of the BC Program. Teachers gain greater insight into water quality and watershed issues while learning new skills for using the water sampling equipment that they receive during the workshop. They also gain a greater practical knowledge for data management techniques including uploading and downloading their data to and from the LUMCON Bayouside Classroom website and analyzing data within a spreadsheet. For more information about the LUMCON Bayouside Classroom Program, go to www.lumcon.edu/bayousideclassroom, or for the "From H-2-O" teacher workshop, go to www.lumcon.edu/education/Teacher.asp, or for more information about BTNEP, go to www.btne.org.

July 2015

JUNE

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AUGUST

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SUNDAY

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

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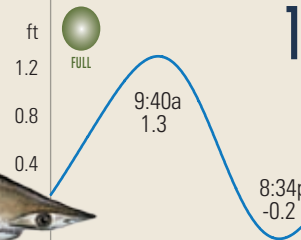
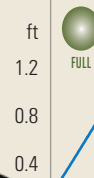
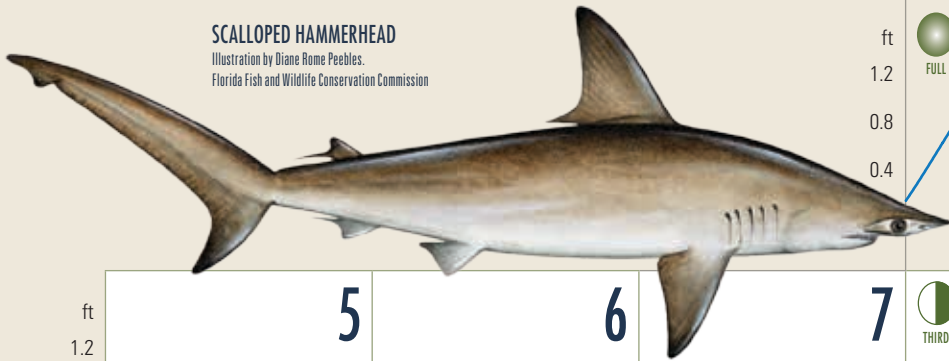
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SCALLOPED HAMMERHEAD

Illustration by Diane Rome Peebles.
Florida Fish and Wildlife Conservation Commission



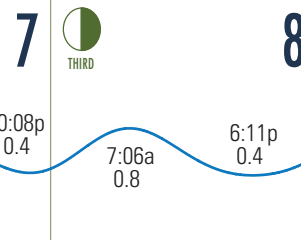
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Independence Day

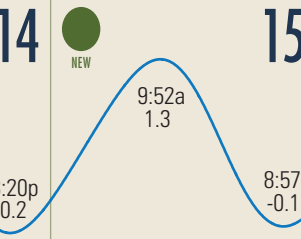


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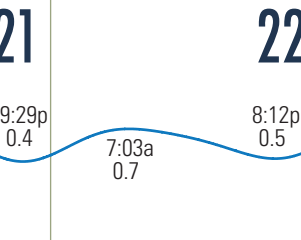


15

16

17

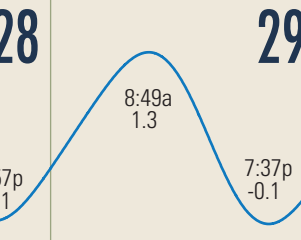
18



23

24

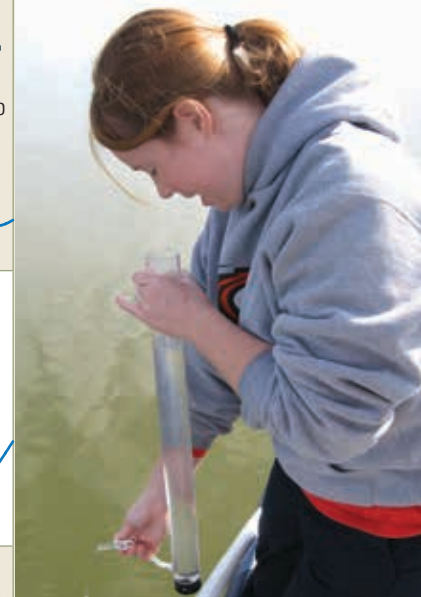
25



29

30

31



Measuring Water Clarity,
Murt Conover, LUMCON

High Tide:

July 30
9:37 a.m. • 1.3 ft.

Low Tide:

July 1
8:34 p.m. • -0.2 ft.



Barataria-Terrebonne National Estuary Program:
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Tides from Barataria Bay, Grand Isle, East Point,
29d 15'48" N 89d 57' 24" W
Tides & Currents by Jeppesen Marine
www.nobeltec.com

Tide adjustment table can be found on the back cover

WETSHOP

What is BTNEP doing to educate teachers about wetlands?

In Louisiana, we have the largest contiguous area of wetlands in the lower U.S. However, we are losing land and wetlands faster than any place on earth. One of the best weapons we have in fighting this problem is the education of citizens. Educating teachers is the fastest way to educate the next generation of citizens. BTNEP is helping to do this by supporting teacher workshops, such as WETSHOP, which is sponsored by the Louisiana Department of Wildlife & Fisheries (LDWF). WETSHOP, which is an acronym for “wetlands workshop,” takes 20 classroom teachers and informal educators into the Barataria-Terrebonne estuary each year to learn firsthand about coastal land loss and discover the science behind Louisiana’s coastal wetlands. The week is packed with information-rich tours, field activities and presentations from experts in wetland ecology and coastal restoration. WETSHOP participants see how barrier islands are the first line of defense against storms and learn how to identify plants that hold these fragile soils together. They travel from freshwater to saltwater marshes, testing water quality and observing changing flora and fauna along the salinity gradient. The information teachers gain at this workshop span a wide range of coastal user groups. Fisheries experts instruct teachers about how commercial seafood and sport fish will decrease as Louisiana’s wetlands disappear, while industry experts at Port Fourchon, the main service port for oil and gas production in the Gulf of Mexico, emphasize Louisiana’s importance to the nation’s energy supply. WETSHOP instructors communicate the urgency of the wetland crisis facing Louisiana that the teachers can carry back to their communities and their students. To become a participant in LDWF’s WETSHOP program, please visit their website at www.wlf.louisiana.gov/wetshop-2014. BTNEP, visit our website at www.btnep.org.



Louisiana Department of Wildlife & Fisheries



Louisiana Department of Wildlife & Fisheries



Louisiana Department of Wildlife & Fisheries

August 2015

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20	21	22	23	24	25	26
27	28	29	30			

6 n 6



Tides from Barataria Bay, Grand Isle, East Point,
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Tide adjustment table can be found on the back cover



Black Skimmers, Delaina LeBlanc

BTNEP COASTAL SHOREBIRD SURVEYS

What is BTNEP doing to protect shorebirds?



American Oystercatcher, Greg Lavaty

COASTAL BIRD CONSERVATION PROGRAM

Beginning in 2005, the Barataria-Terrebonne National Estuary Program (BTNEP) worked in collaboration with the National Audubon Society (NAS) and the Louisiana Department of Wildlife and Fisheries to conduct the first ever ground-nesting shorebird survey of the Louisiana coast. Objectives of this survey included identifying and prioritizing threatened coastal bird species, monitoring and protecting important nesting and foraging sites, and establishing long-term protection programs for maintaining or increasing their populations. The initial phase included developing a baseline of information on beach-nesting birds including Wilson's Plover, Snowy Plover, American Oystercatcher and Least Tern. Subsequent surveys have been conducted in 2010 and again in 2011. A new survey is planned for the 2015 nesting season. These

surveys provide real numbers about the breeding abundance and distribution of these birds, enabling us to better manage "species of concern."

BEACH RESTORATION IMPACTS TO SHOREBIRDS PROJECT

In January 2013, BTNEP collaborated with the Louisiana Coastal Protection and Restoration Authority to monitor the threatened and endangered Piping Plover during construction of the Caminada Headland Beach and Dune Restoration Project (BA-45) in Lafourche Parish, Louisiana. This project investigates how active restoration projects can change the location of shorebirds. The surveys are conducted every two weeks through the bird's migratory and wintering seasons when most of the Piping Plover are along the northern Gulf Coast. Coordinates, number of individuals, and leg band data are collected for the Piping Plover and other species of concern, such as Wilson's Plover, Snowy Plover and Red Knot. Impacts of restoration projects on these species could have consequences for future projects listed in Louisiana's Comprehensive Master Plan for a Sustainable Coast. Results of this project will help in the development of best management practices for coastal restoration projects.

For more information about birds and BTNEP, go to www.btnep.org.



Banded Piping Plover, Richard DeMay



Wilson's Plover, Delaina LeBlanc



Wilson's Plover Nest Hatching, Delaina LeBlanc

September 2015

AUGUST

S	M	T	W	T	F	S
2	3	4	5	6	7	8
9	10	11	12	13	14	15
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30	31					

OCTOBER

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25	26	27	28	29	30	31

SUNDAY

MONDAY

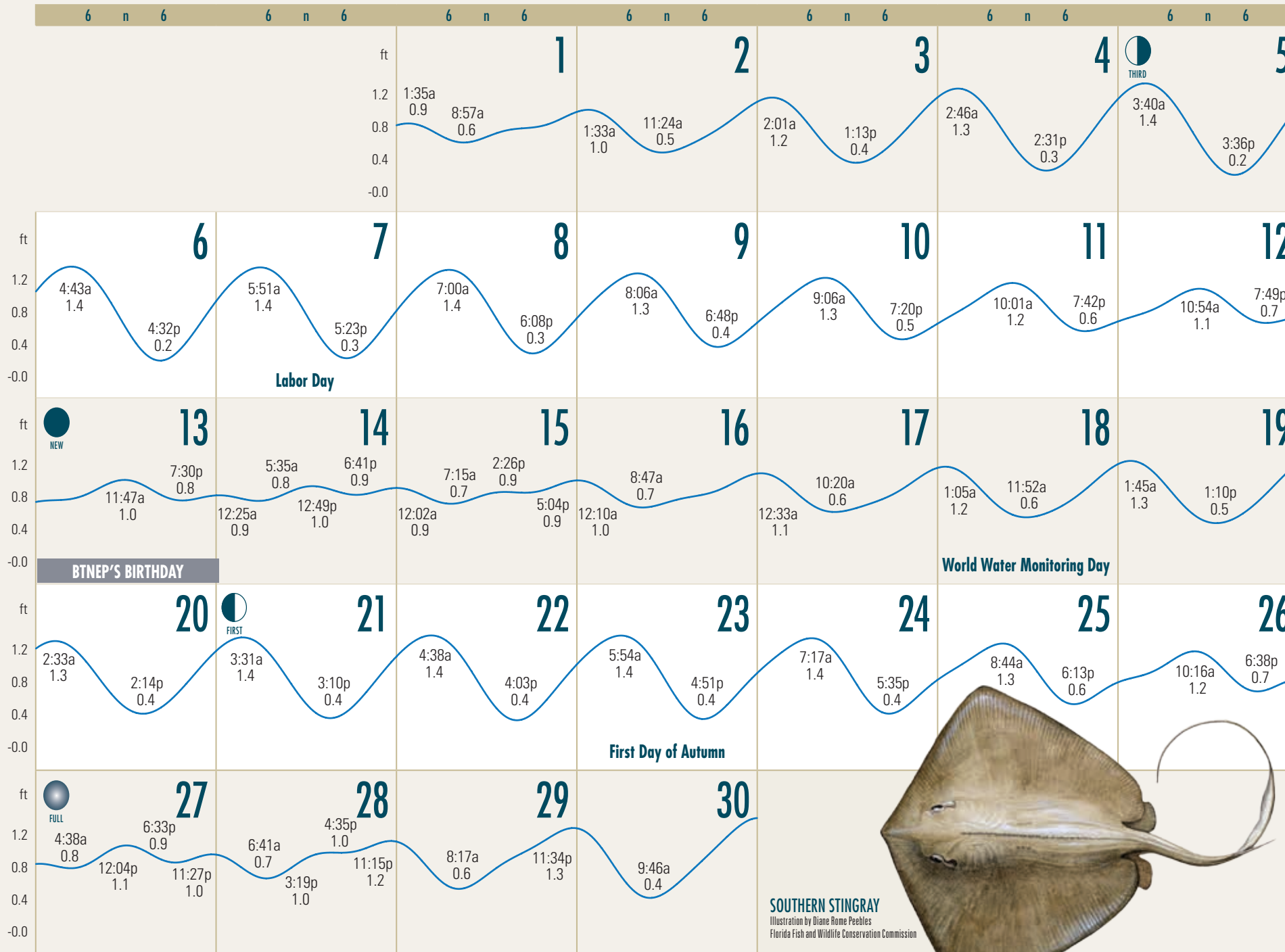
TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY



Snowy Plover, Natalie Waters

High Tide:
September 22
4:38 a.m. • 1.4 ft.

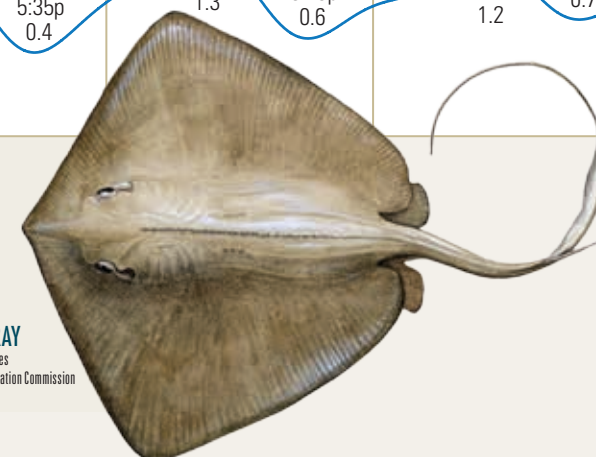
Low Tide:
September 6
4:32 p.m. • 0.2 ft.



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SOUTHERN STINGRAY
Illustration by Diane Rome Peebles
Florida Fish and Wildlife Conservation Commission

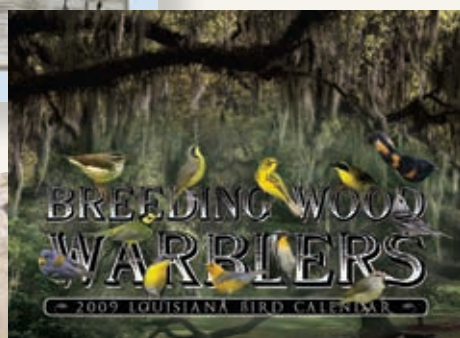


Le Conte's Sparrow, Greg Lavaty

THE BTNEP BIRD CALENDAR SERIES

What is BTNEP doing to promote Eco-Tourism?

Beginning in 2006, the Barataria-Terrebonne National Estuary Program (BTNEP) began developing an annual bird calendar that was distributed primarily to birders across the country. Each calendar has a thematic message, focusing on a group of birds including waders, raptors, warblers, and sparrows. The focus of the bird calendars is three-fold: 1) bring awareness to a national audience of birders about Louisiana's land loss crisis, 2) illustrate the importance of this habitat to migratory birds, and 3) promote avian tourism for coastal Louisiana. This project has been highly effective as demonstrated by the feedback received from calendar recipients. It is effective because birders are passionate, are increasing in numbers and understand the migratory nature of birds - birds that migrate through Louisiana twice annually are the same birds found throughout North America. They also understand the importance of providing habitat for birds throughout their migratory range. In 2012, we partnered with a number of coastal Convention and Visitor's Bureaus (CVBs) to develop a calendar promoting 12 of Louisiana's best coastal birding spots. Again in 2014, we partnered with local CVBs to develop a calendar on Louisiana Shorebirds. For 2015, the title of the calendar will be "Louisiana Ducks." Millions of these birds travel to Louisiana to overwinter in our rice fields, swamps, marshes, and near-shore coastal waters. Birding Louisiana's winters provides for spectacular views of many species of ducks that are found across the state. As with previous calendars, the Louisiana coastal birding trail will be provided on the back of the calendar along with contact information for all CVB's along the coastal birding trail. For more information about the BTNEP Bird Calendar Series or birding along the Louisiana coast, visit our website at www.btnep.org.



October 2015

SEPTEMBER

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27	28	29	30			

NOVEMBER

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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

SUNDAY

MONDAY

TUESDAY

WEDNESDAY

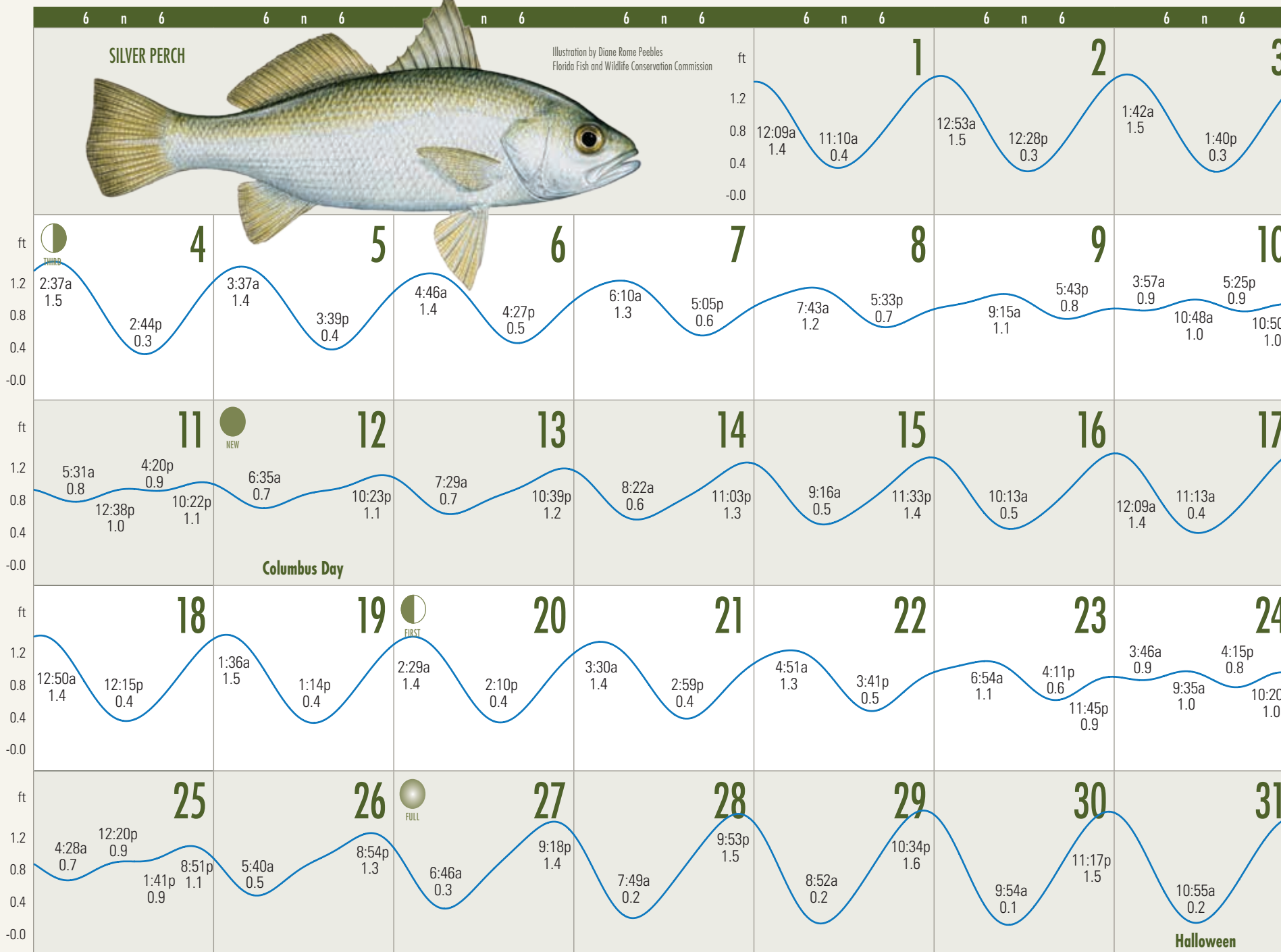
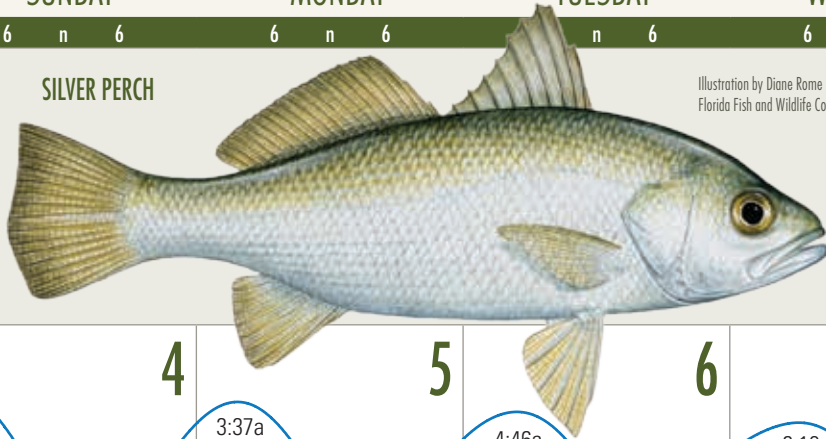
THURSDAY

FRIDAY

SATURDAY

SILVER PERCH

Illustration by Diane Rome Peebles
Florida Fish and Wildlife Conservation Commission



Red Winged Blackbird, Delaina LeBlanc

High Tide:

October 29
10:34 p.m. • 1.6 ft.

Low Tide:

October 30
9:54 a.m. • 0.1 ft.



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Tides & Currents by Jeppesen Marine

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FOURCHON MARITIME RIDGE PLANTING AND RESEARCH PROJECT

How is BTNEP restoring habitat?

The Barataria-Terrebonne National Estuary is the fastest disappearing land area on earth. To combat this loss, critically-imperiled habitats are being restored. The Fourchon Maritime Forest Ridge and Marsh Restoration Project at Port Fourchon, Louisiana is an example of how dredged sediments can be used to rebuild vital marsh and ridge habitat for species of fish, shellfish, wildlife and Neotropical migratory birds. Sixty new acres of restored coastal habitat were created with an additional 60+ acres still planned. The current footprint includes a mile long ridge approximately 200 feet wide with an adjacent 100 foot apron of marsh along either side. In 2005, phase one of the ridge was constructed and over 20,000 herbaceous and woody plants were planted with volunteer help. Since completion of the second phase of the ridge in 2008, an additional 62,000 plants were planted over 32 events with 785 volunteers. Herbaceous plants provide habitat and stabilize the soil to reduce erosion. Selected woody species, such as live oak (*Quercus virginiana*) and red mulberry (*Morus rubra*), provide food and protection for Neotropical migratory birds using the Mississippi Flyway every spring and fall. Because many species are not salt tolerant and because saline sediments were used to build the ridge, a scientific study was built into the woody species plantings using different combinations of trees and soil treatments, analyzed for growth, survivability and effectiveness of treatments. Treatments include the use of fertilizer (for plant nutrients), gypsum (for salt reduction), and bagasse (for moisture retention). In addition, soil samples are taken twice per year to determine plant nutrition. Through analysis of plant response and soil characteristics over time, we hope to determine when soil conditions will support the growth of these plants. With this knowledge, future maritime ridge restoration projects using saline sediments will be able to determine when to plant woody species. For more information about BTNEP, go to www.btnep.org.



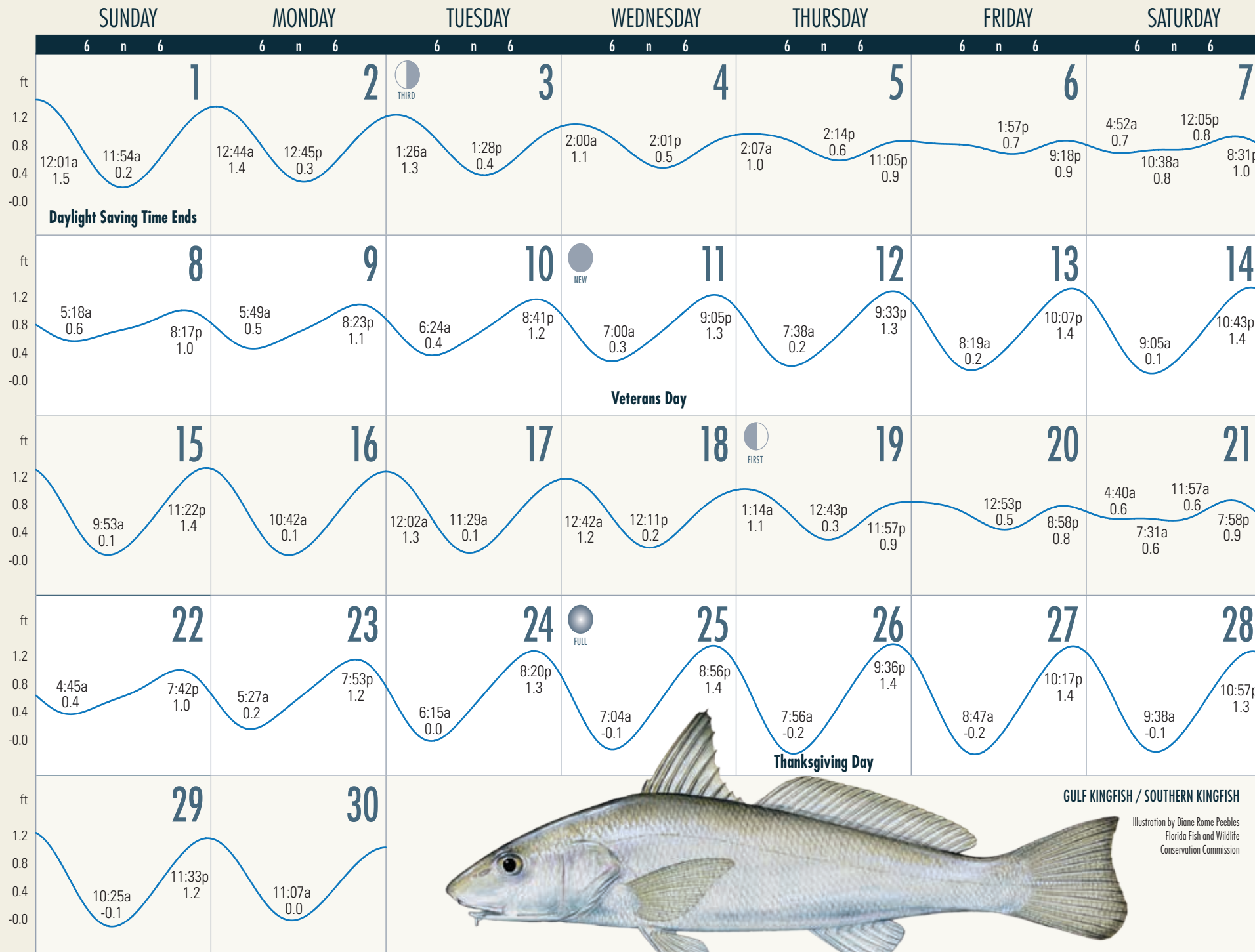
November 2015

OCTOBER

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25	26	27	28	29	30	31

DECEMBER

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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



Staging Plants, Matt Benoit

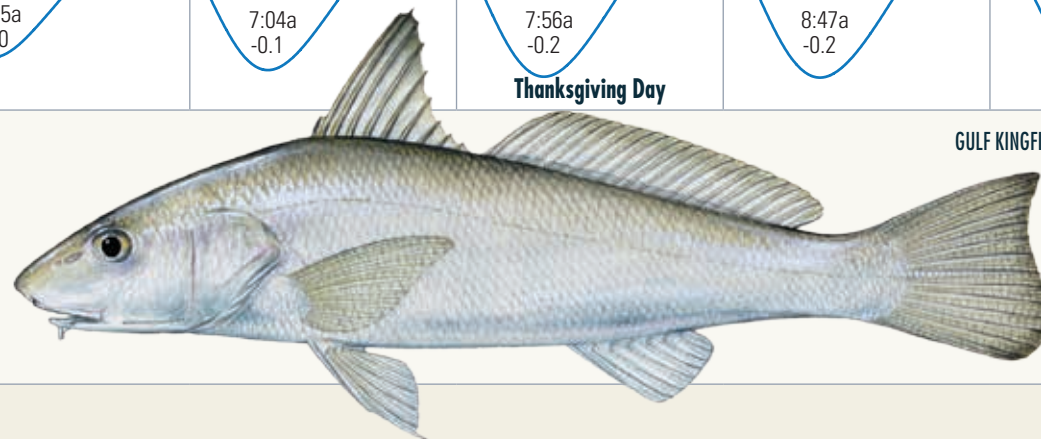
High Tide:
November 1
12:01 a.m. • 1.5 ft.

Low Tide:
November 27
8:47 a.m. • -0.2 ft.



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Tide adjustment table can be found on the back cover



GULF KINGFISH / SOUTHERN KINGFISH

Illustration by Diane Rome Peebles
Florida Fish and Wildlife
Conservation Commission



RIGHTEOUS FUR AND MARSH DOG

What more can we do about nutria?

The nutria is an invasive rodent from South America brought to Louisiana in the 1930s to bolster the fur industry. They quickly became established in the wild and when demand for fur dropped in the 1980s, the nutria population exploded. By the late 1990s, nutria damaged nearly 100,000 acres of coastal wetlands each year. That number is down to less than 5,000 acres each year thanks to the Coastwide Nutria Control Program (CNCN), managed by the Louisiana Department of Wildlife & Fisheries. Using federal Coastal Wetlands Planning, Protection and Restoration Act funds, the CNCN pays hunters and trappers a \$5 incentive for each nutria tail they harvest. Unfortunately, over 90% of the carcasses are discarded once the tails are removed, so the lustrous pelts and high-quality meat are often wasted. Enter Righteous Fur and Marsh Dog.

Righteous Fur is a fashion design collective established by New Orleans-based designer Cree McCree in 2009 with grants from the Barataria-Terrebonne National Estuary Program (BTNEP). They produce nutria jewelry, fur fashions and accessories from animals harvested through the CNCN. Their goals are to help control a destructive invasive species, raise public awareness about the need to restore our vanishing coast, and provide a stylish, eco-friendly alternative to traditional fur. Their numerous fashion shows are snazzy multimedia events that have garnered global press attention.

Marsh Dog is a Baton Rouge-based company established in 2011, also with a grant from BTNEP. They utilize the wild, fresh meat of nutria harvested through the CNCN to craft a line of dog treats. Nutria meat is a high quality, low fat, lean and nutritious source of protein. All other ingredients, including brown rice, sweet potatoes, and molasses, are local, fresh, and almost entirely sourced in Louisiana. Look for “Barataria Bites” biscuits and “Bark!” nutria jerky in pet stores across southern Louisiana.

Righteous Fur and Marsh Dog are raising awareness about nutria and land loss, while increasing the value of nutria pelts and meat. If these great market development ideas become popular enough, they may eventually take the place of incentive programs, freeing up government funds for coastal restoration in other areas.

For more information, go to www.righteousfur.com and www.marshdog.com.

Courtesy of Marsh Dog



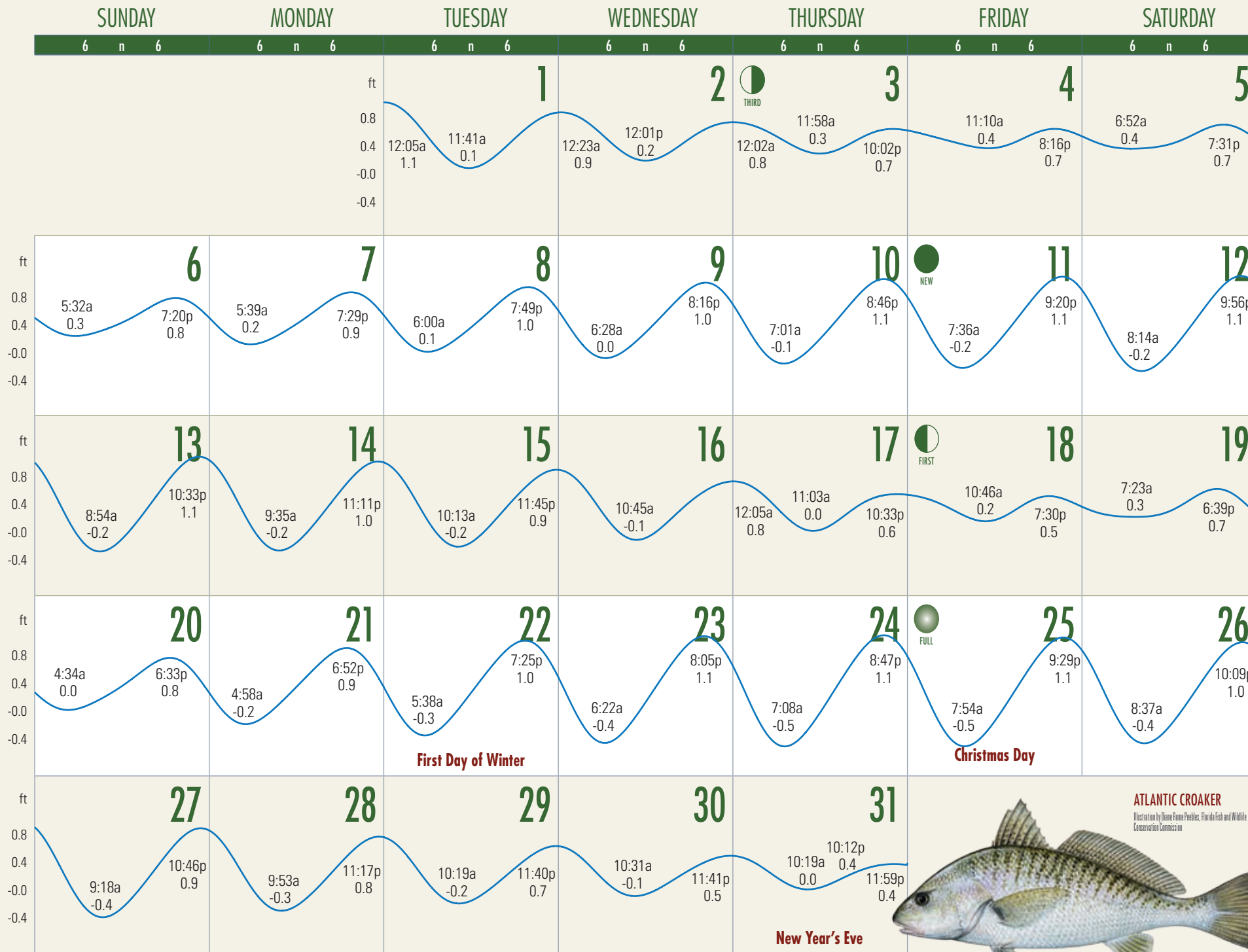
December 2015

NOVEMBER 2015

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JANUARY 2016

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24	25	26	27	28	29	30
31						



Courtesy of Righteous Fur

High Tide:
December 12
9:56 p.m. • 1.1 ft.

Low Tide:
December 24
7:08 a.m. • -0.5 ft.



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Tide adjustment table can be found on the back cover



ATLANTIC CROAKER
Illustration by Diane Hume-Peabody, Florida Fish and Wildlife
Conservation Commission

TIDE CORRECTIONS

To find the best time to fish your favorite locations, find a location that is closest to your area and add or subtract the time from the corresponding daily prediction.

AREA	LOW (Hours:Minutes)	High (Hours:Minutes)
Shell Beach, Lake Borgne	+5:10	+4:01
Chandeleur Lighthouse	+0:38	+0:05
Venice, Grand Pass	+1:28	+1:06
Southwest Pass, Delta	-0:29	-1:29
Empire Jetty	-1:35	-2:03
Bastian Island	+0:22	-0:19
Quatre Bayou Pass	+0:27	+1:18
Independence Island	+2:09	+1:29
Caminada Pass	+1:44	+1:14
Timbalier Island	+0:33	-0:41
Cocodrie, Terrebonne Bay	+2:50	+1:10
Wine Island	+1:12	+0:08
Raccoon Point	-0:10	-1:03
Ship Shoal Light	-1:40	-2:54

Charts in this calendar are intended for use solely as a reference guide to Louisiana fishing. It is not intended for navigational use. BTNEP makes no warranty, expressed or implied, with respect to the accuracy or completeness of the information contained in these charts. BTNEP assumes no liability with respect to the use of any information contained in this document.

BTNEP THANKS...

Terrebonne Parish Consolidated Government and the Greater Lafourche Port Commission for their generous contribution in helping to print this calendar.



2015 TIDAL GRAPH CALENDAR

Program Director: Kerry St. Pé

Deputy Director: Dean Blanchard

Project Manager: Andrew Barron

Text provided by: Andrew Barron & BTNEP Staff

Design and layout by: deGravelles & Associates

P.O. Box 2663, NSU • N. Babington Hall • Thibodaux, LA 70310
800.259.0869 • www.BTNEP.org

Cover photos (l to r): Song Sparrow, Greg Lavaty; Surveyor, Erik Johnson; Tree Planting, Matt Benoit; Dead Trees, BTNEP; Tern On Nest, Delaina LeBlanc; Titrating DO, Murt Conover, LUMCON; Brown Pelicans Nesting, Delaina LeBlanc; and Background Photo: Marsh Damage from Feral Hogs, Steve Hartley, USGS

FISHING REGULATIONS

This is not a comprehensive or official copy of the laws in effect and should not be utilized as such. Size and creel limit regulations are presented for selected species only. These species as well as other species may be managed by seasons, quotas and permits. Different regulations for bass, catfish and crappie may apply within specific areas. Contact the Louisiana Department of Wildlife and Fisheries (LDWF) for specific information.

FRESHWATER SPECIES

SPECIES	SIZE LIMIT	DAILY LIMIT
Large mouth and Spotted Bass	None	10
(Atchafalaya Basin and Lake Verret-Palourde Area)	None	7
Crappie (Sac-a-lait)	None	50
Striped or Hybrid Striped Bass	None: 2 over 30" (TL)	5 (Any combination)
White Bass	None	50
Yellow Bass	None	50
Channel Catfish	25 less than 11" (TL)	100
Blue Catfish	25 less than 12" (TL)	100
Flathead Catfish (Spotted, Yellow or Opelousas)	25 less than 14" (TL)	100
Freshwater Drum (Gaspergou)	12" Minimum (TL)	25

100 total of these three species

SALTWATER SPECIES

SPECIES	SIZE LIMIT	DAILY LIMIT
Speckled Trout*	12" Minimum (TL)	25
(Cameron & Calcasieu Parishes**)	12" Minimum (TL), two over 25"	15
Red Fish*	16" Minimum (TL), one over 27"	5
Black Drum	16" Minimum (TL), one over 27"	5
Southern Flounder	None	10
Greater Amberjack	State & Federal Reg. 30" Min. (FL)	1
Cobia (Ling or Lemon Fish)	State & Federal Reg. 33" Min. (FL)	2
King Mackerel	State & Federal Reg. 24" Min. (FL)	2
Spanish Mackerel	State & Federal Reg. 12" Min. (FL)	15
Red Snapper***	State & Federal Reg. 16" Min. (TL)	***

* For Red Drum (Redfish) and Spotted Seatrout (Speckled Trout): Recreational saltwater anglers may possess a two day bag limit on land; however, no person shall be in possession of over the daily bag limit in any one day or while fishing on the water, unless that recreational saltwater angler is aboard a trawler engaged in commercial fishing for a consecutive period of longer than 25 hours.

** (Cameron & Calcasieu Parishes) Daily take and possession limit of 15 Spotted Seatrout (Speckled Trout): no person shall possess, regardless of where taken, more than two spotted seatrout exceeding 25 total inches in length, which are considered part of the daily bag and possession limit in state and coastal territorial waters South of 1-10 at the Louisiana/Texas border to its junction with LA HWY 171, south to Hwy's 14 and 27 near Holmwood, south along Hwy. 27 to Hwy. 82 to the Gulf of Mexico.

*** There are specific regulations for Red Snapper and Shark. Contact the LDWF for more information.

FORK LENGTH (FL): Tip of snout to fork of tail. TOTAL Length (TL): Tip of snout to tip of tail.

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