

The Newsletter of South Slough **National Estuarine**



Friends of South Slough Reserve, Inc. Charleston, Oregon

and the

The Gift of Birds

by Tom Gaskill

In a season filled with short days, long nights, and twinkling colorful lights, I find myself thrilled once again by the annual occurrence of the Audubon Christmas Bird count and all that entails. The gift of birds is both subtle and profound. A passion for birds is not genetic, as I discovered when trying to entice my son Gabriel to get out of bed at six in the morning and head for South Slough to meet a group of stalwart volunteers for a day of bird watching, counting, data collecting and enjoyment.

He balked at first. The warm cozy bed and pervasive

darkness of a winter dawn held him firmly in the grasp of his new queen size mattress. Yet, as I quietly padded around the kitchen making coffee and preparations for a day in the field, what to my wondering eyes should appear but my 11 year old son, dressed and ready to bird. Truth be told, he is no novice to the Christmas Bird Count, although these last few years his interests have tended toward other pursuits in the early morning. Of late his habit has been to join mid-day, although

he has toughed out some pretty nasty weather in the past. In 2009, 7.6 mm of rain fell continuously from sunrise to sunset on a day that never reached over 12 degrees Celsius.

But on December 18th, 2011, he was present and out the door with me to make the trek to South Slough for the beginning of the census. By 7:30 am he had met the other volunteers, a wonderful group of expert, intermediate, and novice birders willing to dedicate a day to the woods and waterways in search of all things winged. This team included one other young birder and her parents, several Americorps volunteers, and a participant that had migrated all the way across the Cascades from Bend for the event.

We split into 4 teams and divided up our section, Area 6, of the 15 mile diameter count circle. Area 6 encompasses a swath approximately 6 miles long and 4 miles wide along the north/south axis of South Slough. The 5,000 acres of the reserve are only part of the total study area, and this is only one part of the entire count circle. Trying to count and identify all the birds in such a place affords many opportunities to get cold, wet, lost, and otherwise worn out. Fortunately for our crew, the weather was fantastic and at last count, we had all made it back to turn in our data. Some of us even made it to the big event after dark known as "the countdown" where teams announce their finds and

> the compiler, Tim Rodenkirk, tallies the species for the day. This year was truly remarkable with a record 162 species found!

> Yet, for me, my biggest gift of the day, and perhaps the season, was watching my son try to answer the question that drives so many Oregon coast bird watchers into cold, dark, rainy weather at odd hours day after day, year after year.

> We were on our way back from Cox Canyon when we spied a small water bird that we quickly identified as a pied-billed grebe

diving and surfacing along the course of Winchester Creek. That wasn't the bird that caught Gabriel's attention, however. He had seen a small, brown bird darting along the undercut bank and the chase was on! With rapt attention and a focus typically reserved for novels about dragons and wizards, he locked on to the signal of that secretive little creature until it appeared once again, though only for a brief moment. No matter, he was in the hunt and he pursued that marsh wren until he had a positive identification and a big victory grin. Mystery solved, we headed on through the cold, wet marsh in search of the next gift.

South Slough National Estuarine Research Reserve America's first national estuary Founded 1974 Charleston, Oregon



A Golden-crowned kinglet.

South Slough Gains Forested Acreage

By: Julie Curtis Reprinted from Dept. of State Lands E-News Communications Manager Oregon Department of State Lands



1,105 acres acquired through Gustafson estate, NOAA matching funds

In 2010, the South Slough National Estuarine Research Reserve successfully competed for Coastal and Estuarine Land Conservation Program (CELCP) federal funds, managed by the National Oceanic and Atmospheric Administration. The program provides federal matching grants for the acquisition of coastal and estuarine lands that have significant conservation,

Forested Upland

recreation, ecological, historical or aesthetic values; or that are threatened by conversion from their natural or recreational state to other uses.

The Reserve proposed buying 1,105 acres of forested uplands, freshwater wetlands and estuarine lands in the Anderson, Wasson and Hayward watersheds that enter into the South Slough. These drainages are the primary freshwater contributors on the western edge of the slough and are directly upstream from extensive wetland and shellfish restoration projects in which the Reserve has invested significant federal and state funds over the past decade. Acquiring these properties will enable the Reserve to better protect these investments and allow it to implement projects focused on ridge-top to estuary restoration.

In December 2011, DSL finalized the purchase of two forest properties in the South Slough watershed. One 618.7-acre parcel is located at the northwest corner of the Reserve, and a second 486.1-acre parcel in the southwest corner. The parcels were purchased from Roseburg Resources Company and Plum Creek Timber.

The total cost of the two acquisitions is \$2,244,000: \$1,122,000 from the NOAA Coastal and Estuarine Land Protection Program, and \$1,122,000 from the Gustafson Estate which bequeathed funds to the SSNERR for land acquisition. Appraisals for the properties were completed by independent appraisal firm Mason, Bruce & Girard.

In addition to these two parcels, the Reserve and DSL agreed on transferring management responsibilities for 312 acres of scattered Common School Fund trust lands within the South Slough boundary to the SSNERR Management Commission. DSL will receive a total of \$1,978,000 in compensation for the surface rights of the property (\$989,000 from NOAA programs and \$989,000 from the Gustafson fund). The funds will be deposited in the Common School Fund.

"WATERSHED TO OYSTER BEDS" EXHIBIT

By Tom Gaskill

Work on the development and fabrication of a new exhibit for the entryway at the South Slough Interpretive Center is almost complete. The project is comprised of three discreet, interrelated components.

A series of two aquaria and a terrarium will be integrated with a series of three platforms depicting the transition from a forested freshwater stream to the shoreline of the estuary and a tidal channel populated by a native oyster bed. A handpainted mural by renowned artist Peggy O'Neal will provide the backdrop for the exhibit, highlighting elements of the watershed and estuary.

The tanks will feature fish of the estuary including bay pipefish, sculpin, and gunnels. Additional invertebrates such as shore crabs and shrimp may also be included. The terrarium will host native ferns and amphibians such as roughskinned newt, western red-legged and Pacific tree frogs.



2011 REFLECTIONS FOR SOUTH SLOUGH

Staff Report

Some notable accomplishments at the South Slough Reserve in 2011 included, the biggest National Estuaries Day ever, the highest number of education program participants in history of Reserve, Coastal and Estuarine

Land Conservation Program properties acquired with support from the Gustafson estate, and 162 bird species recorded during the 2011 Christmas bird count; a new state record.

There were also a lot of "firsts" in 2011, some of them landmark achievements: 2011 was the first year we used a multi passenger vessel as a regular part of our on-water education programs. We also used System Wide Monitoring Program data to identify trends in environmental conditions, and hosted teacher training

FOSS Board Vice President, Nicole Jackson and SSNERR Manager Mike Graybill get carried away by Louie the Dungeness Crab

workshops in Bend and Portland for the first time.

Several longer term projects came to a close including a Cooperative Institute for Coastal and Estuarine Environmental Technology research project on marshes and National Estuarine Research Reserve System funded projects to identify and describe a network of reference wetlands in Oregon. A host of much needed improvements to the Interpretive Center and yurts were completed in 2011.

Other major developments that mark 2011 at South Slough Reserve: the South Slough Administrative offices

> were moved to Charleston; major upgrades of information technology were implemented; approximately 1,000 Port Orford cedar trees were planted; the Reserve hosted two multi person AmeriCorps crews; distance learning was incorporated into the portfolio of educational programs; an energy plan was developed with conservation measures; and improvements to the 10 minute trail system were made.

> As we reflect on 2011 and look forward to 2012, prospective activities include, the Friends of South Slough float-house project, new aquaria exhibits at the Interpretive

Center, a climate change grant to study Coos and Coquille watersheds, and 8increased community involvement to improve the understanding and stewardship of Pacific Northwest Estuaries and Coastal Watersheds.

that peeked his curiousity. Often we would see Dennis and

FAREWELL TO A LONG-TIME FRIEND AND VOLUNTEER

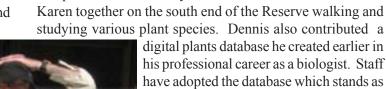
Staff Report

On Sunday afternoon, January 1st our dear friend and

volunteer Dennis Phillips passed away at the age of 69. Dennis suffered from Parkinson's disease and was combatting symptoms of a brain hemorrhage due to a series of recent falls.

Dennis volunteered at South Slough for the past 10 years and spent many hours helping Reserve staff collect marsh plants and field data, identify invasive plants and helping implement eradication methods. Dennis was responsible for creating the South Slough Reserve herbarium, a "library" containing hundreds of dried and pressed

representative plant specimens collected from various habitats at South Slough. Dennis was enthusiastic about fieldwork and was known to devise field experiments to answer questions about the status of species



his professional career as a biologist. Staff have adopted the database which stands as the record of plant species status found in South Slough and surrounding watersheds.

Dennis touched many people. He found ways to stretch our minds, ways to pull us into the deeper and the wilder, to disallow our desire to sit passive and complacent even as we have struggled to find a way to be more involved and committed. He spoonfed us the botany that we failed to commit to memory and taught us the

beauty of chasing the rainbow of a dichotomous key to the end, to genus and to species. We appreciate all Dennis has done for the Reserve over the years and are glad to have known him.He will be missed. by all of us.

Dennis Phillips at FOSS plant sale

By Deborah Rudd SSNERR Public Involvement Coordinator

Last week SSNERR Education Coordinator Tom Gaskill, Friends of South Slough Bookstore Manager, David

Lunde and I received a behind the scenes tour of the exhibit fabrication at the KoKwow design studio in North Bend. Upon entering the warehouse, one of the designers enthusiastically described how he put together the estuary habitat façade that will house the new "Watershed to Oysterbed" exhibit. A miniature eelgrass bed, salt marsh, upland forest and eroded sandstone form complete with marine fossils was painstakingly built, painted and adhered to three separate, attached frames. Tom

excitedly picked up an alder log from the exhibit and handed it to David remarking, "Looks real, doesn't it?" After Tom took some measurements and photos for preparation of the life support system installation, Larry Watson of Ko Kwow Arts & Exhibits led us to the art studio where his wife, renowned artist Peggy O'Neal was working on the mural backdrop. Friendly little dogs with vigorously wagging tails greeted us at the door followed by Peggy in her painting apron brightly smiling at her guests. Immediately I could feel the creative energy of the room as Peggy flitted

> around like a little bird describing frames of the mural, details she wanted to add and elements she felt brought meaning to the mural's story. Photographs of various natural artifacts, landscapes and wildlife covered the table. A recording of forest soundscapes played softly in the background while we admired the mural and listened to Peggy share her plans for the remaining portions.

> All three of us felt honored to have been given the opportunity to see into the creative world of

these artists and left with much anticipation of presenting the new exhibits to visitors to the Reserve.

Our "Watershed to Oysterbed" exhibit will have a sneak preview presentation for members of the Friends of South *Continued on page 5*

Forested Watershed Volunteer Program

'LOVELY AS A TREE'

By Nina Foran Gee, SSNERR Volunteer

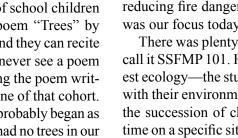
Across America a certain generation of school children from Maine to California learned the poem "Trees" by Joyce Kilmer. Ask any depression baby and they can recite at least the first line: "I think that I shall never see a poem as lovely as a tree...." Some can even sing the poem written in 1913 by the American poet. I am one of that cohort.

I must admit my infatuation with trees probably began as a fourth-grader in Los Angeles where we had no trees in our yard or our block; I thought they only grew in a park, like Griffith Park where the telescope was. Trees were almost mythical entities compared to dinosaurs and Indians to a kid in part of L.A. But I know better now.

Last November an item in the South Slough Fall and Winter Newsletter calendar lured me to a volunteer training program to learn more about the forests of South Slough. About 25 other folks, including ten AmeriCorps volunteers, showed up at the visitor's center to see what Forester Jake Robinson had in store for us. A private consulting forester and specialist in private forest management and restoration, Jake worked with grant funding to develop the South Slough Forest Management Plan for the Upland Forests. An introduction to his plan, directed to improving health, reducing fire danger, and conserving estuarine resources, was our focus today.

There was plenty to learn in Jake's indoor presentation, call it SSFMP 101. He gave us an introduction to basic forest ecology—the study of organisms and their interactions with their environment. He touched on seral progressions, the succession of changes in plant communities through time on a specific site. He spoke of inventorying, monitoring and cruising, all required to manage 5000 acres in the care of South Slough, and surrounding the estuary. We did not tackle all the specifics of his management plan, some 86 pages in draft form with details of each watershed by name that would be homework for later. We were in basic training.

Finished with his lecture, Jake donned his cruising vest with a loop or pocket for every piece of equipment needed in the field. He loaded GPS range finder, calculator, Biltmore Stick (or Cruiser Stick) height hypsometer, string ruler, first aid kit, radio, reflector, hatchet, water proof clip *Continued on page 5*





Peggy describes the highlights of the mural

Lovely As a Tree Continued from page 4

board and, last but not least, yerba matte and straw. "Walking Christmas presents!" he announced. Then, quoting John Muir, "The clearest way into the Universe is through a forest wilderness," he said "follow me."

Jake describes the South Slough forest as unique

because it is the southern portion of the spruce range and northern portion of the Port Orford cedar range with spruce, cedar and hemlock all common species within the Sitka Spruce forest type. We cruised a plot close to the Center, first identifying shrubs and deciduous trees-blackberry, cascara, alder, wax myrtle, willow-to put on our forested watershed data sheet, along with the duff depth. Then we learned how to measure the DBH



Jake Robinson measures the diameter of the tree as part of a plot inventory

(diameter breast height), estimate the percent of live crown, and classify each tree from 'free to grow' to dead (1-4).

The largest snag in our plot was a Port Orford cedar

Volunteers who wish to learn more about the forested watershed and opportunity to contribute to the management plan surveys may call the Reserve at (541) 888-5558 about future training programs.

more than 12 inches in diameter. Jake said it is dead from

water borne disease—an endemic root rot from a non-native

fungus which has become a major concern in forests all

over the region. In an effort to reverse the cedar decline, the

AmeriCorps Silver Seven team, with us this day, has just

finished planting 700 cuttings of Port Orford cedar taken

from resistant trees at South

Slough. We must wait to see if

into this forested watershed

class recalling the poet Joyce

Kilmer's "Trees." What we

discovered were tools that will

be used to implement South

Slough's recently adopted for-

est management plan and the

awesome opportunity to par-

ticipate in improving the un-

derstanding and stewardship of

Pacific Northwest estuaries and

coastal watersheds; the mis-

sion of South Slough National

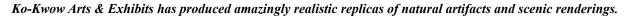
Estuarine Research Reserve.

As volunteers we plunged

the tiny trees succeed.

Sneak Peak continued from page 4

Slough, donors, designers, fabricators and volunteers who made this project possible on Saturday, February 18 as part of the Friends Annual Meeting. The official exhibit opening for all guests will be on Saturday, April 21st as an Earth Day celebration. (See our calendar insert for more details.)





a Nile

Winter/Spring 2012

South Slough National Estuarine Research Reserve PO Box 5417 Charleston, OR 97420



South Slough Want Ads - We need:

Volunteers to help with the front desk on Saturdays. Two shifts available, 10 am-1 pm or 1 pm-4:30 pm.

Trail maintenance volunteers. Able-bodied folks to pull weeds, rake and do various other trail maintenance jobs. Put in a couple of hours on any of six days. Monday-Saturday.

For more information on either of these

Call 541.888.5558 EXT 58, or email deborah.rudd@state.or.us

Friends of South Slough Board and Committee Members.

FOSS board meets the 4th Tuesday at 5pm every month. We are seeking individuals with interest/expertise in fundraising, grant writing, marketing and/or financial management.

To learn more: email valeriecooley@frontier.com (FOSS Board President) or call 541.888.5558.

MARK YOUR CALENDARS!

South Slough Summer Science Camps 2012

Registration begins april 1st

July 10 - 13 Zoea (grades K-1st)

July 17 -20 Megalops

(GRADES 2-3)

July 24-27 INSTAR (GRADES 4-5)

July 31 - August 3 Dungeness (grades 6 and above)

SUMMER CAMPS OFFER FOUR DAYS OF

ACTITIVIES WITH AN ESTUARY THEME.

www.southsloughestuary.org



SOUTH SLOUGH SPRING CALENDAR 2012



February

FEBRUARY 2

9 ам - 12 рм

SOUTH SLOUGH 101 TRAINING SERIES -VISITOR SERVICES OPTION MODULE "ESTUARY FACTS AND FRONT- LINE CUSTOMER SERVICE" The Interpretive Center front desk is a multi-faceted volunteer position that includes a wide range of duties. Training will focus on interacting with visitors, explaining trail maps and exhibits, answering phones and transferring calls, registering participants for programs, assisting education staff with preparation of materials for programs,

basic data entry and publicity material assistance.

*Currently, there is no charge for the course however we are asking that individuals who choose to take the optional modules commit to 48 hours a year (about 4 hours a month) of volunteer time.

FEBRUARY 4

SOUTH SLOUGH BIRDING

8 - 10 ам

Explore the reserve in search of birds. An interpreter, binoculars and a spotting scope are provided. [Max-15 participants] (\$1/birder)

FEBRUARY II

BUILD A BIRDHOUSE WORKSHOP

9 ам - 12 рм

Create wildlife habitat for your backyard. Before the swallows and wrens begin to nest, come build a birdhouse to encourage them to live in your backyard! We'll provide the supplies and tools. Work on your own or bring a partner. [Max-15 participants] (\$10/birdhouse, limit l birdhouse/participant)

FEBRUARY 18

Friends of South Slough Annual Meeting IO AM - I PM The annual member's meeting highlights FOSS's important work in 2011 and unveils the work plan for 2012.Volunteer and Friend of the Year awards will be presented.We will take part in a behind scenes look at our new aquaria installation. RSVP by February 11.

FEBRUARY 24

ESTUARY EXPLORERS ~ WETLANDS

10 AM - 3 PM

Children 6-12 years old, join us for hands on fun in the estuary. Learn about wetlands by experimenting in the classroom and discovering wetlands in the field. Come dressed for the weather and ready to hike. Bring a sack lunch and water bottle. [Min-4 children/ Max-12] (\$7/child - Sign up for 4 for classes \$20/child)

FEBRUARY 25

FILM: life ~PLANTS AND PRIMATES~ I - 3 PM Watch this amazing documentary about life on earth. Narrated by Oprah Winfrey this month's episodes will be "Plants and Primates". We'll provide the big screen and popcorn. (free)

All programs begin at the South Slough National Estuarine Research Reserve Interpretive Center unless otherwise noted.

Please call (541) 888 - 5558 to reserve your place and confirm all programs.

Programs may be cancelled due to low enrollment or hazardous weather.

MARCH

MARCH 3

BIRDS ON THE ESTUARY

8 - 10 AM

2 - 4 рм

Travel the shores of Charleston in search of winged wildlife. Interpreter, binoculars and spotting scopes provided. **Meet at the Charleston Visitors Center**. [Max-15 participants] (\$1/birder)

STEPHANIE DONALDSON ART OPENING

Stephanie creates nature themed art with acrylic and print on canvas. Come meet the artist as you relax in the natural beauty of scenic views of South Slough. (free)

MARCH 10

9 ам - 3:30 рм

FROM SALMONBERRY TO SAGEBRUSH - AN EDUCATOR'S WORKSHOP FOCUSED ON PLACE BASED LEARNING

For more information and to register please visit our home page at www.southsloughestuary.org

March 16

ESTUARY EXPLORERS ~ FISH

10 AM - 3 PM

Children 6-12 years old, join us for hands on fun in the estuary. Learn about fish by viewing in the classroom and discovering fish in the field. Come dressed for the weather and ready to hike. Bring a sack lunch and water bottle. [Min-4 children/Max-12](\$7/child -Sign up for 4 for \$20/child)

March 17

NATIVE PLANTINGS IN YOUR BACKYARD WORKSHOP 9AM - 12 PM Learn the benefits, ethics and techniques of using native plants in landscaping. Take home a native plant for your yard. [Min-5 participants/Max-20] (\$5/participant)

FRIENDS OF SOUTH SLOUGH NATIVE PLANT SALE II AM - 2 PM Help support the natural world and FOSS by purchasing native plants for your spring landscaping needs.

MARCH 21

SOUTH SLOUGH 101 TRAINING SERIES - WORKING WITH CHILDREN AND TRAIL INTEPRETATION 10 AM - 3 PM Learn techniques to work effectively with school groups as well as

navigating our trail system and how to lead guided hikes. (free)* MARCH 23 INTERPRETIVE CENTER CLOSED - STATEWIDE FURLOUGH MARCH 24 INTERPRETIVE CENTER CLOSED

March 28 & 29 Estuary Explorers

10 AM - 3 PM

Children 6 - 12 years old, join us for hands on fun in the estuary. Fish and Wetlands will be the theme for theses 2 days. Come dressed for the weather and ready to hike. Bring a sack lunch and water bottle. [Min-4 children/Max-12](\$7/child - Sign up for 4 classes for \$20/child)

March 31

 TIDE OF THE TODDLERS ~ DEEP BLUE SEA
 IO - II AM

 Discover the natural world with your wee one, ages I to 5.
 [Max-I5 children] (\$I/child)

South Slough 101 Training Series -Visitor Services Option Module "Estuary Facts and Front- line Customer Service" See February 2 for description* I - 3:30 pm



SOUTH SLOUGH SPRING CALENDAR 2012



April

APRIL 7

SOUTH SLOUGH BIRDING

8 - 10 ам

Explore the reserve in search of birds. An interpreter, binoculars and a spotting scope are provided. [Max-15 participants] (\$1/birder)

Introduction to Plant ID Hike

I - 4 pm

Discover the 10 common plants and trees of the Oregon Coast on this introductory hike. Field guides will be provided. Come dressed for the weather and ready to hike with a water bottle. [Min-4 participants/Max-12] (\$1/participant)

APRIL 13

ESTUARY EXPLORERS ~ WILD WATERS

10 ам - 3 рм

Children 6-12 years old, join us for hands on fun in the estuary. Learn about watersheds by experimenting in the classroom and in the field. Come dressed for the weather and ready to hike. Bring a sack lunch and water bottle. [Min-4 children/Max-12] (\$7/child -Sign up for 4 classes for \$20/child)

APRIL 14 & 15

KAYAK INSTRUCTION WITH HELEN WILSON

Saturday's class will focus on beginning kayak safety skills. Sunday's class will move skill instruction up to the intermediate level. Learn how to roll and stay safe on your paddle adventures. Class will paddle at Sunset Bay. [Min - 6 participants/Max - 10 each day] (\$100/participant for one day or \$150/participant for 2 days)

APRIL 21

SOUTH SLOUGH WATERSHED TO OYSTERBED EXHIBIT GRAND-OPENING

I - 3 рм

Come view this new, exciting exhibit! A series of two aquaria and a terrarium depict the transition from a forested freshwater stream to the shoreline of the estuary and a tidal channel populated by a native oyster bed. A hand-painted mural by renowned artist Peggy O'Neal provides the backdrop for the exhibit, highlighting elements of the watershed and estuary. The tanks will feature fish of the estuary including bay pipefish, sculpin, and gunnels. The terrarium will host native ferns and amphibians such as rough-skinned newt, western red-legged and Pacific tree frogs. (free)

APRIL 28

 TIDE OF THE TODDLERS ~ BIG CEDAR WALK
 10 - 11 AM

 Discover the natural world with your wee one, ages 1 to 5. Follow

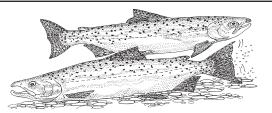
 signs to Big Cedar trailhead from Interpretive Center.

 [Max-15 children](\$1/child)

BUILD A BAT BOX WORKSHOP

І-4 рм

Build a bat box for your bakyard wildlife habitat. We'll provide the supplies and tools. Work on your own or bring a partner. [Min-5 participants/Max-15](\$10/bathouse)



MAY

May 5

BIRDS ON THE ESTUARY

Travel the shores of Charleston in search of winged wildlife. Intepreter, binoculars and spotting scopes provided. **Meet at the Charleston Visitors Center**. (\$1/birder)

BIG CANOE TRIP

II ам - 2 рм

8 - 10 AM

Explore South Slough on a trail that flows with the tide. Canoe, PFDs and paddles provided. Participants will be expected to paddle for 2 hours, be able to rise from a seated position on the floor to a standing position, be able to lift 50 pounds and hike up to 1 mile on uneven terrain. Feet and legs may get wet and muddy at launch points. Dress for wind and rain in synthetic layers. [Min-4 participants/ Max-6](free)

MAY 12

 FILM: life ~REPTILES AND AMPHIBIANS & INSECTS~
 I - 3 PM

 Watch this amazing documentary about life on earth. Narrated by
 Oprah Winfrey this month's episodes will be "Reptiles and Amphibians & Insects". We'll provide the big screen and popcorn. (free)

May 18

ESTUARY EXPLORERS WATER LABS ~ *MIGRATIONS* **10** AM - 3 PM Children 6 - 12 years old, join us for hands on fun in the estuary. In honor of International Migratory Bird Day learn about how water is important for migrating birds. Come dressed for the weather and ready to hike. Bring a sack lunch and water bottle. [Min-4 children/Max-12] (\$7/child - Sign up for 4 for \$20/child)

May 19

PADDLE THE ESTUARY

9 AM - 2 PM

Explore South Slough on a trail that flows with the tide. Provide your own kayak or canoe (no inflatables or pedals), paddles, PFDs, water and lunch. Feet and legs may get wet and muddy at launch points. Driver and shuttle will be provided. [Min-3 boats/Max-8](\$15/boat)

Tide of the Toddlers ~ Fish

н ІО-ІІам

Discover the natural world with your wee one, ages 1 to 5. [Max-15 children](\$1/child)

May 25 Interpretive Center Closed - Statewide Furlough May 26 Interpretive Center Closed

Activity fees and donations cover materials and are used by the Friends of South Slough Reserve, Inc. in support of the Reserve.

The Interpretive Center, located 4 miles south of Charleston on Seven Devils Road, is open Tuesday through Satrday from 10 am to 4:30 pm. Trails are open daily from dawn to dusk.

For more information visit us at www.southsloughestuary.org