About the Book

*Petit Pierre and the Floating Marsh* was created through a partnership with Audubon Nature Institute and the New Orleans Pelicans. With this heartwarming story about a pelican and his wetland friends, Audubon and the Pelicans hope to encourage reading and connect children with the beauty and importance of Louisiana’s wetlands. The pages of the book are filled with lush illustrations that highlight a charming tale and bits of science for children to absorb.

Written by Johnette Downing and illustrated by Heather Stanley, *Petit Pierre and the Floating Marsh* was selected to represent the state of Louisiana at the 2016 National Book Festival in Washington, DC. It also had its official book launch at the 2016 Louisiana Book Festival in Baton Rouge, LA. Proceeds from book sales support wetland education initiatives.

About the Author and Illustrator

Hailed as the “Pied Piper of Louisiana Music Traditions” Johnette Downing is dedicated to sharing her Louisiana roots music and books with children across the globe. The author of numerous picture books and recordings, Johnette is an international award winner performing word-wide. Heather Stanley is an illustrator and graphic designer whose artwork ranges from hand drawn pictures to digital compositions. Raised in southern Louisiana she holds both BFA and MFA degrees in design and illustration, and is the Director of Creative Services at Audubon Nature Institute.

AudubonNatureInstitute.org/petit-pierre
FUN in the Classroom
Activities to extend student learning with Petit Pierre

Find the Honeybee 🐝

What is the Louisiana state insect? It’s the honeybee! Look for the hidden honeybee on each spread of the book. Can you find them all?

Louisiana designated the honeybee as official state insect in 1977. Honeybees play such an important role in agriculture and they are important pollinators!

Speak Some Cajun Words

Cajun French is a form of the French language spoken in Louisiana, primarily in the southern part of the state. Look for the Cajun and French words in the facts at the bottom of each page.

- Louisiana = *Louisiane* (luh-zee-ahn)
- Floating Marsh = *flotant* (floh-tawnt)
- American Lotus Flower = *graine à voler* (gran-a-voh-ler)
- White Perch = *sac-au-lait* (sock-o-lay)

Learn About Louisiana

All of the plants, animals, insects, reptiles, birds and habitats in this book are native to Louisiana! Kids can find all the answers to the questions below by reading the facts at the bottom of the page then looking at the illustration above it for a visual reference.

- What is the Louisiana state bird? The brown pelican
- What is the Louisiana state crustacean? The crawfish
- What is the Louisiana state mammal? The black bear
- What is the Louisiana state tree? The bald cypress
- What is the Louisiana state reptile? The American alligator
- What is the Louisiana state insect? The honeybee
Use the Book as a Field Guide

*Petit Pierre and the Floating Marsh* can be used as fun field guide for kids. Everything in the book is native to Louisiana. As kids read about the animals, plants and habitats in the story they will learn to recognize these things in the wild.

- Have you ever seen a pelican near the water?
- Did you see an alligator at Audubon Zoo?
- Will you look for a honeybee in your backyard?
- Can you find a cypress tree outside?

**Discover the Wetlands**

**What is a floating Marsh?**

A floating marsh is a network of plants and roots that live on top of a cushion of water and do not take root in the soil. In some places the floating marsh is thin but in other places it can grow thick enough to support a person’s weight. A floating marsh is an important part of the Louisiana wetland.

**Have you ever heard of a wetland?**

Petit Pierre lives in a wetland! Wetlands are areas where standing water covers the soil or an area where the ground is very wet. The most common types of wetlands in Louisiana are swamps and marshes, and they both support a wide variety of plants and animals.

**Why are wetlands important?**

1. Provide habitat for a variety of wildlife and plants.

2. Filter, clean and store water. Wetlands act as a natural purification system by cleaning the groundwater and supplying nourishment for the abundant wildlife found there. Wetland soil and plants gradually absorb the water acting as a filter and cleaning the water supply.

3. Collect and hold flood waters. Wetlands act like sponges for flood waters. Plants found in wetlands also help control water erosion.

4. Act as a buffer for storms. The plants and trees of a wetland help minimize wind and buffers destructive waves. For every three miles of marsh, the storm surge of a hurricane is reduced in height by one foot!

5. Serve as important commercial industries to the rest of the nation. The rich environment of Louisiana’s wetlands provides 30 percent of the seafood catch in the contiguous United States.
Wetland in a Pan Class Activity

Objective:
Students will build a wetland model to demonstrate the function of wetlands regarding storm protection.

Materials:
- Shallow rectangular baking pan (aluminum foil pans work well)
- Modeling clay
- Large kitchen sponges
- Potting soil
- Play sand
- Coffee stirrers
- Twigs, leaves, grasses collected by students
- Monopoly houses
- Florist foam
- Scissors
- Art supplies

Procedure:
Begin the activity by reviewing with students what wetlands are and their value. Show the students pictures of wetlands and ask them to think about the types of plants and animals that might live there.

Discuss with students that wetlands, like all ecosystems, perform important functions such as filtering pollutants, reducing flood damage, and preventing soil erosion. Explain that the students will build their own models to demonstrate how wetlands protect areas from storm surges and hurricanes.

Students, individually or in small groups, will make their own detailed wetland models using aluminum foil pans, a soil and sand mixture, and florist foam. On one side of the pan students should create land using a base of the soil/sand mixture. They should then top the mixture with florist foam. The edge of the habitat should end in a slope at the middle of the pan.

The students should include the plants and animals that would be found in the wetland. Plants and animals can be made out of clay, coffee stirrers, twigs and other collected materials. Students should also include neighborhoods (Monopoly houses) as part of their habitat. To complete their wetland, students should cut a large kitchen sponge to fit snugly against the slope of their habitat.

Fill empty side of pan with water and ask students to predict what will happen if their habitat is hit by the storm surge of a hurricane. Next, have students create the wave action of a storm surge by lifting the corners of the pan closest to the water area and quickly replacing the pan back on the table. Students should observe and record what happens. Use the storm surge discussion questions to discuss what happened.

Repeat the steps, but this time remove the sponge from the pan. Observe and record what happens. Use discussion questions to lead conversation with students.

Discuss with students that most wetlands are shallow basins that collect water and slow its rate of flow. This slowing process helps reduce flooding and also helps prevent soil erosion. In many coastal areas, wetlands are drained and filled in, and houses or marinas are built along the water. Without a wetland buffer, these developed areas are often subject to severe flooding and erosion, especially during storms.

Storm Surge Discussion Questions:
1. Predict what will happen if the habitat is hit by a storm surge with the wetlands in place. Was your prediction correct? Where did the water go? What happened to the soil/sand mixture along the edge of the land?
2. Predict what will happen if the habitat is hit by a storm surge without any wetland protection. Where did the water go this time? What happened to the neighborhood? What happened to the habitat? What happened to the sand/soil mixture along the edge of the land?
3. Why is the storm surge reduced when wetlands are in place?
Questions for the Kids

1. How many animals did you see in the book? There are 10 (this includes birds, reptiles, insects, etc.). Which one was your favorite and why?

<table>
<thead>
<tr>
<th>Pelican</th>
<th>Egret</th>
<th>Turtle</th>
<th>Honeybee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perch</td>
<td>Heron</td>
<td>Muskrat</td>
<td></td>
</tr>
<tr>
<td>Crawfish</td>
<td>Black Bear</td>
<td>Alligator</td>
<td></td>
</tr>
</tbody>
</table>

2. Where does the Perch live? In the water.

3. Where does the Crawfish live? In the mud.

4. Where does the Egret live? In the reeds.

5. Where does the Heron live? Near the lotus.

6. Where does the black bear live? In a cypress tree.

7. Where does the turtle live? In a sunny spot.

8. Where does the muskrat live? In the grass.

9. Where does a pelican live? In the wetlands.
Friend a Pelican

At the end of the book there is a section where kids can learn how they can help the wetlands. In the story, each animal friend gives Petit Pierre a special gift to build his wetland home: water, mud, a reed, a lotus, a cypress seedling, sun, grass, and wisdom. What can the children do?

Be a Wetland MVP and Take the Pledge

The Louisiana wetlands are fragile ecosystems where all of the flora, fauna, and humans depend upon one another, each playing a vital role in creating a harmonious, healthy, and balanced habitat or home. It takes a community to make a home, with each person doing their small part for the greater good. Working together with friends and family, kids can help Petit Pierre make a home in the wetland.

• Practice the three R’s—Reduce, Reuse, and Recycle!

• Participate in programs that help protect and restore wetlands, like a beach clean-up or wetland planting project.

• Pick up litter to keep trash out of the wetlands.

• Plant native species such as live oak, cypress, tupelo, red maple, green ash, hackberry, spartina (cord grass or wiregrass), Rouseau cane, American lotus, and three-cornered grass to preserve the ecological balance of local wetlands.

• Use unbleached paper and recycled products whenever you can. Bleached paper contains toxic chemicals that can contaminate water.