

Sea Oats School Lecture:

NATIVE PLANTS, STRONG DUNES, AND HABITAT GARDENING



Outer Banks, North Carolina

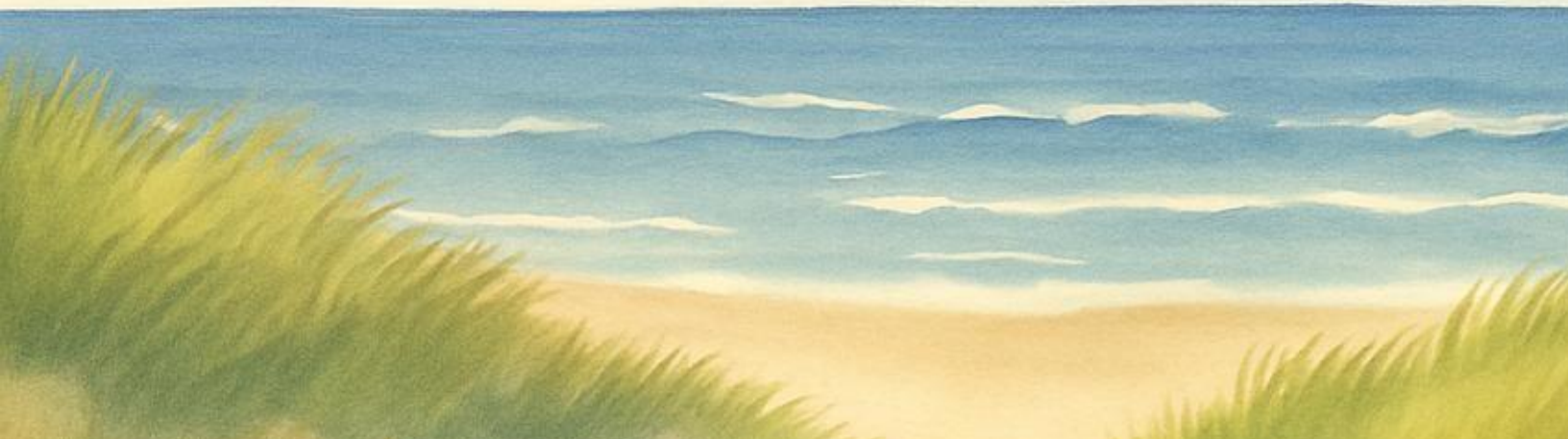
Forward

This storybook was created by the Outer Banks Coastal Conservation (OBCC), a nonprofit organization whose mission is to foster environmental stewardship and a deeper connection to the Outer Banks of North Carolina through outreach, education, and conservation efforts.

We believe that small stories can spark big change. That is why we have made this book available as a free resource for parents, teachers, and community members.

All materials in this book may be freely downloaded, shared, printed and used for educational or nonprofit purposes.

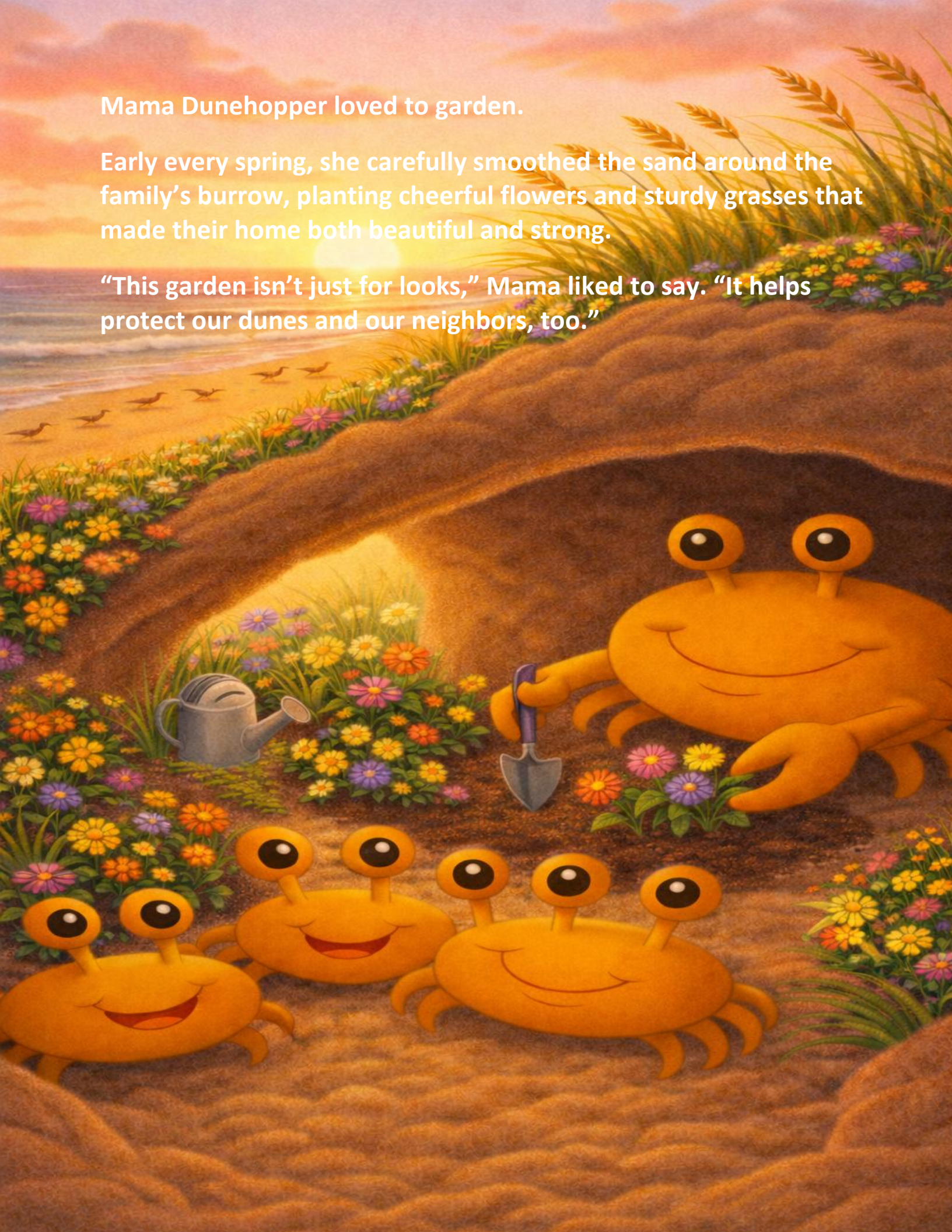
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Mama Dunehopper loved to garden.

Early every spring, she carefully smoothed the sand around the family's burrow, planting cheerful flowers and sturdy grasses that made their home both beautiful and strong.

"This garden isn't just for looks," Mama liked to say. "It helps protect our dunes and our neighbors, too."



One sunny afternoon, Sandy scurried in with exciting news.

“Mama!” she said. “Professor Beachgrass from the botany department of a local university is coming to Sea Oats School! She’s giving a lecture about native and invasive species, dune stability, and habitat gardening. Can we all go?”

Mama smiled. “That sounds wonderful. Let’s all learn together.”



A Trip to Sea Oats School

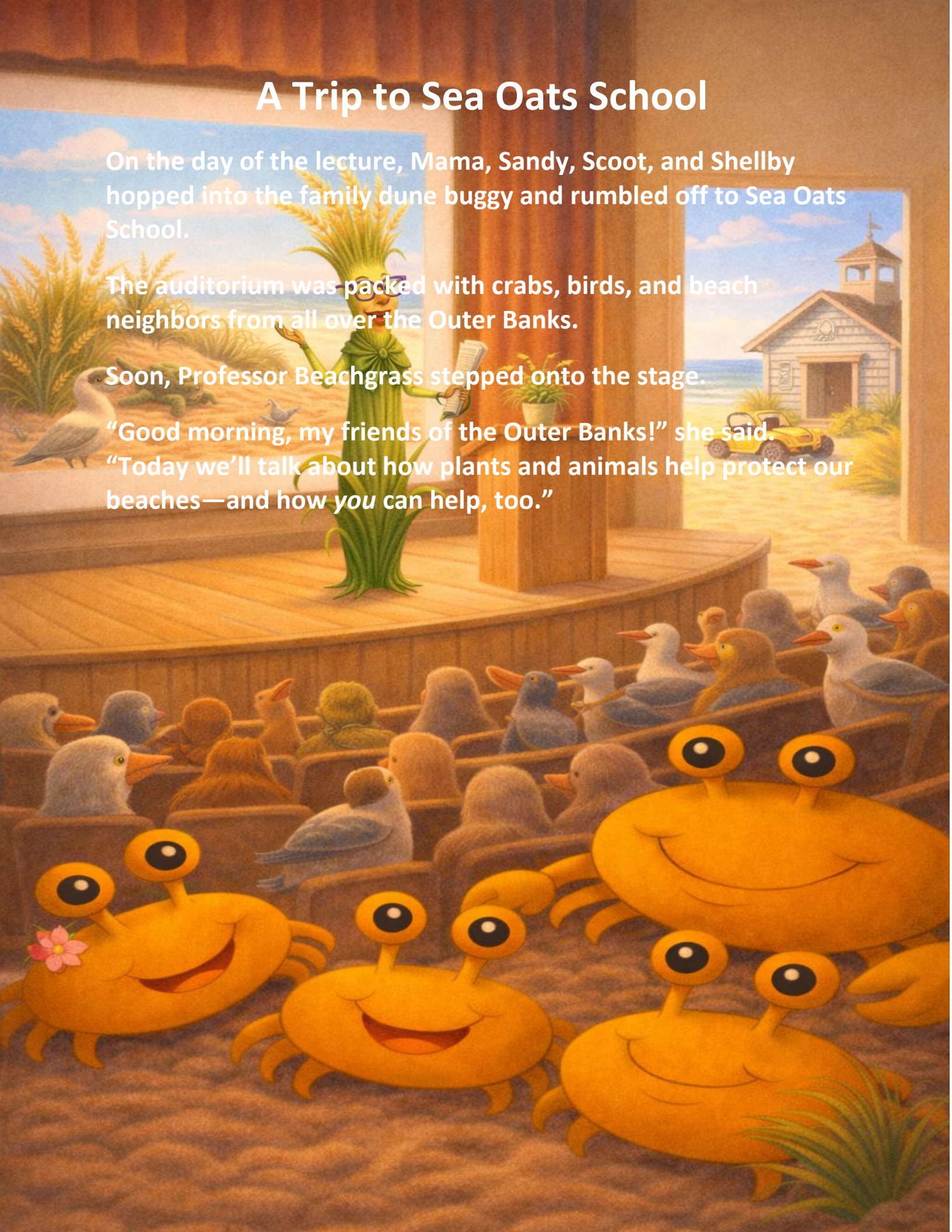
On the day of the lecture, Mama, Sandy, Scoot, and Shellby hopped into the family dune buggy and rumbled off to Sea Oats School.

The auditorium was packed with crabs, birds, and beach neighbors from all over the Outer Banks.

Soon, Professor Beachgrass stepped onto the stage.

“Good morning, my friends of the Outer Banks!” she said.

“Today we’ll talk about how plants and animals help protect our beaches—and how *you* can help, too.”



Native vs. Invasive Species

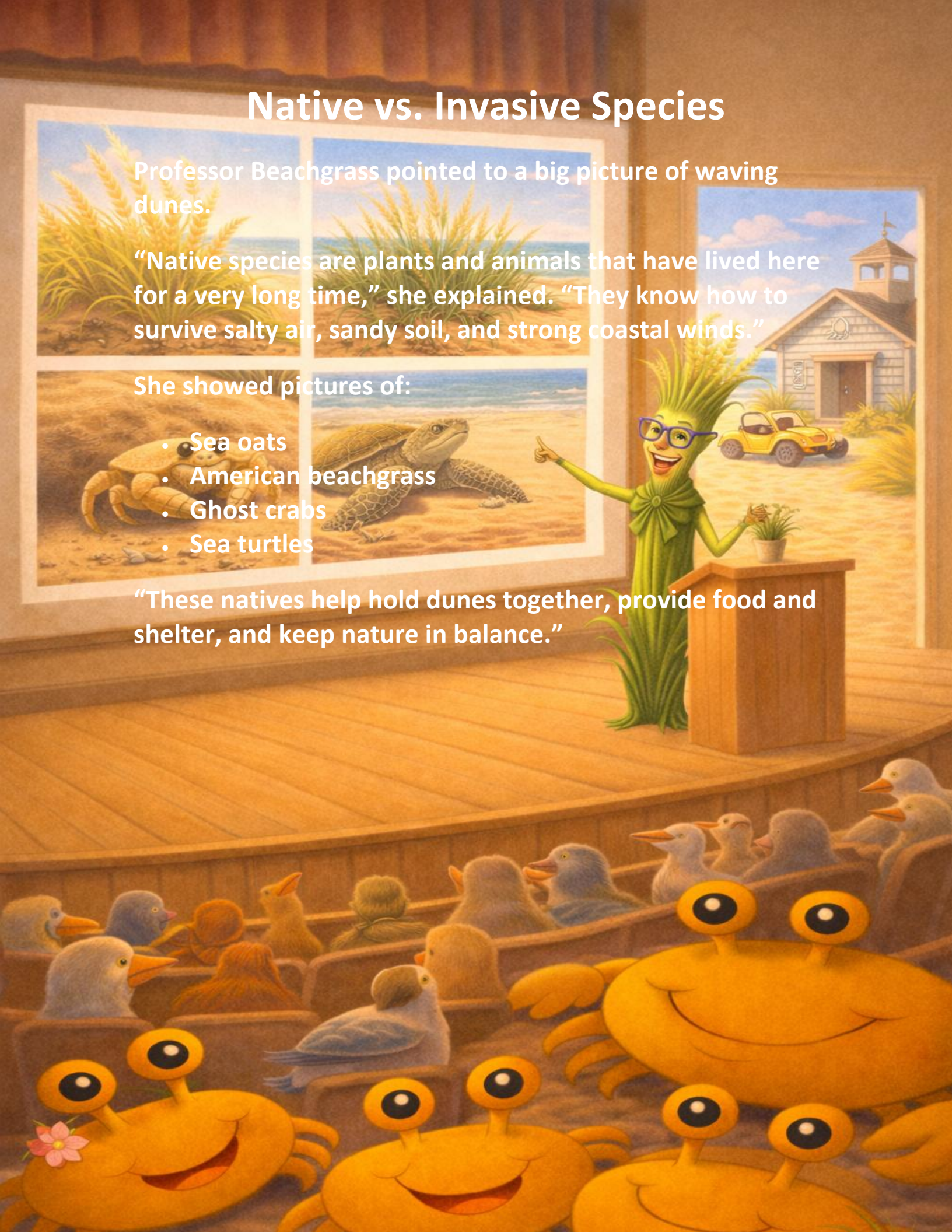
Professor Beachgrass pointed to a big picture of waving dunes.

“Native species are plants and animals that have lived here for a very long time,” she explained. “They know how to survive salty air, sandy soil, and strong coastal winds.”

She showed pictures of:

- Sea oats
- American beachgrass
- Ghost crabs
- Sea turtles

“These natives help hold dunes together, provide food and shelter, and keep nature in balance.”



Sandy raised her claw. "What about invasive species?"

"Invasive species," Professor Beachgrass replied, "come from other places and spread too fast. They can crowd out native plants and damage habitats."

She showed pictures of kudzu and feral hogs.

"They steal space, food, and water from species that belong here."

Scoot whispered, "Definitely not friends of the dunes."



Why Dunes Matter

Next, Professor Beachgrass talked about dune stability.

“Sand dunes are nature’s walls,” she said. “They protect homes, roads, animals—and burrows like yours—from storms and flooding.”

She explained how dunes stay strong:

- Deep roots from plants like sea oats hold sand in place
- Dune fences slow the wind
- Undisturbed sand builds up naturally

“And what hurts dunes?” she asked.

“Walking on plants!” Shellby called out.

“Digging big holes!” Scoot added.

“Exactly,” Professor Beachgrass said. “Always use boardwalks and paths. The dunes are alive—even when they look quiet.”



Habitat Gardening

Finally, Professor Beachgrass talked about habitat gardening.

“Habitat gardening means planting native plants to help birds, bugs, and animals,” she explained.

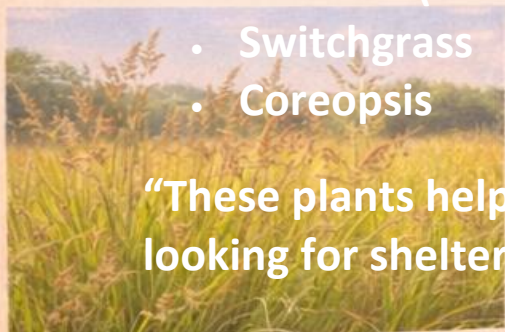
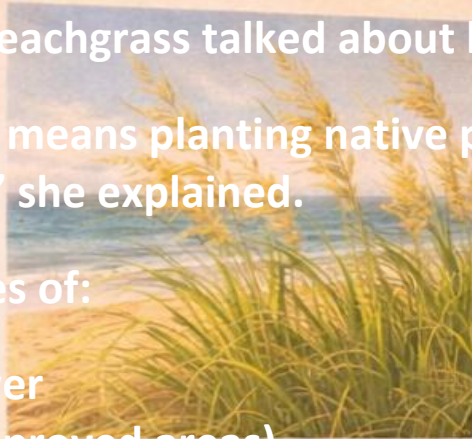
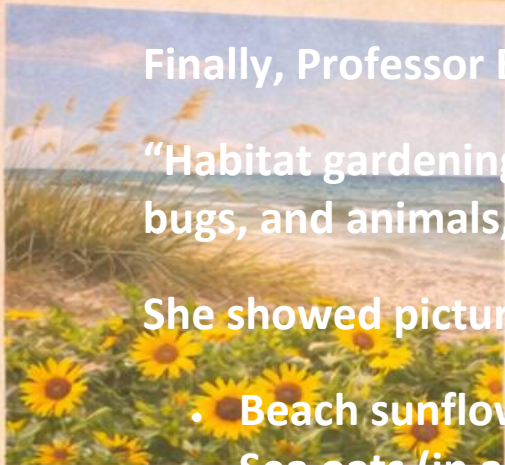
She showed pictures of:

- Beach sunflower
- Sea oats (in approved areas)
- Switchgrass
- Coreopsis

“These plants help butterflies, bees, birds, and baby animals looking for shelter.”

Mama nodded proudly. “That’s just like our garden at home.”

Professor Beachgrass smiled. “Even a small garden can make a big difference—if you choose the right plants and treat dunes with care.”



Home Again

On the ride home, Sandy looked out at the dunes waving in the breeze.

“Our garden helps protect the beach,” she said.

Mama smiled. “That’s right. When we plant native species and care for the dunes, we’re helping the entire Outer Banks.”

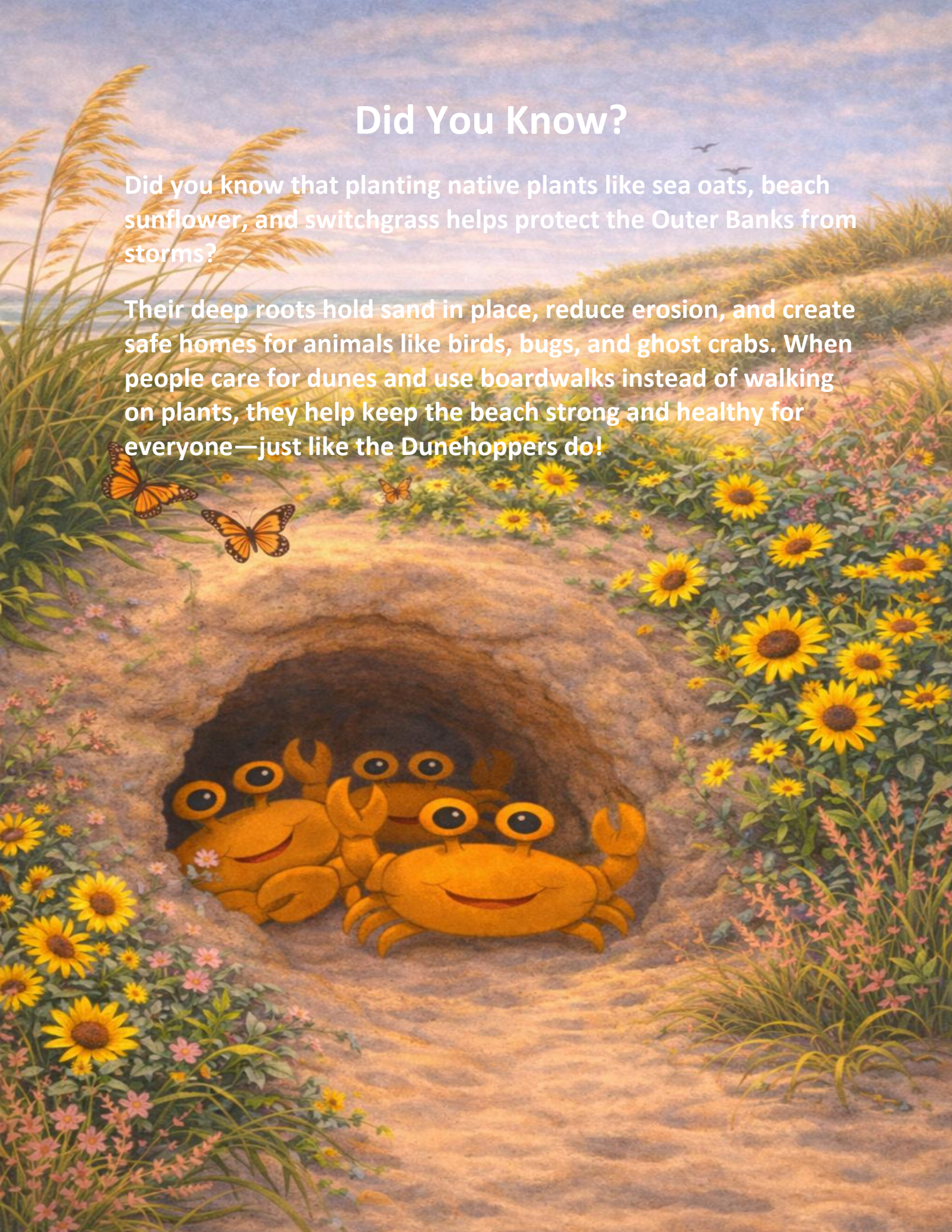
The Dunehoppers felt proud. They weren’t just gardeners anymore—they were protectors of the coast.



Did You Know?

Did you know that planting native plants like sea oats, beach sunflower, and switchgrass helps protect the Outer Banks from storms?

Their deep roots hold sand in place, reduce erosion, and create safe homes for animals like birds, bugs, and ghost crabs. When people care for dunes and use boardwalks instead of walking on plants, they help keep the beach strong and healthy for everyone—just like the Dunehoppers do!



References

National Park Service. (n.d.). *Barrier islands and coastal dunes*. U.S. Department of the Interior.

<https://www.nps.gov/subjects/oceans/barrier-islands.htm>

North Carolina Coastal Federation. (n.d.). *Dune protection and restoration*.

<https://www.nccoast.org/project/dune-protection/>

North Carolina Native Plant Society. (n.d.). *Native plants of the North Carolina coastal plain*.

<https://ncwildflower.org>

North Carolina Sea Grant. (n.d.). *Coastal habitats and native plants*.

<https://ncseagrant.ncsu.edu>

U.S. Fish & Wildlife Service. (n.d.). *Coastal habitat conservation*.

<https://www.fws.gov/program/coastal>

