

The Little Choices That Changed the Shore

A Dunehopper Conservation Story



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.

To learn more, access additional resources at: www.theobcc.org.



One sunny morning on the Outer Banks, the Dunehopper family gathered outside their sandy burrow as the tide slipped quietly back into the Atlantic. The sky glowed soft peach and blue. Sea oats swayed like dancers in the breeze, and tiny coquina shells sparkled in the sun.



Scout scurried along the wrack line—the place where the ocean leaves seaweed, shells, and driftwood behind. But today, something didn't look right.

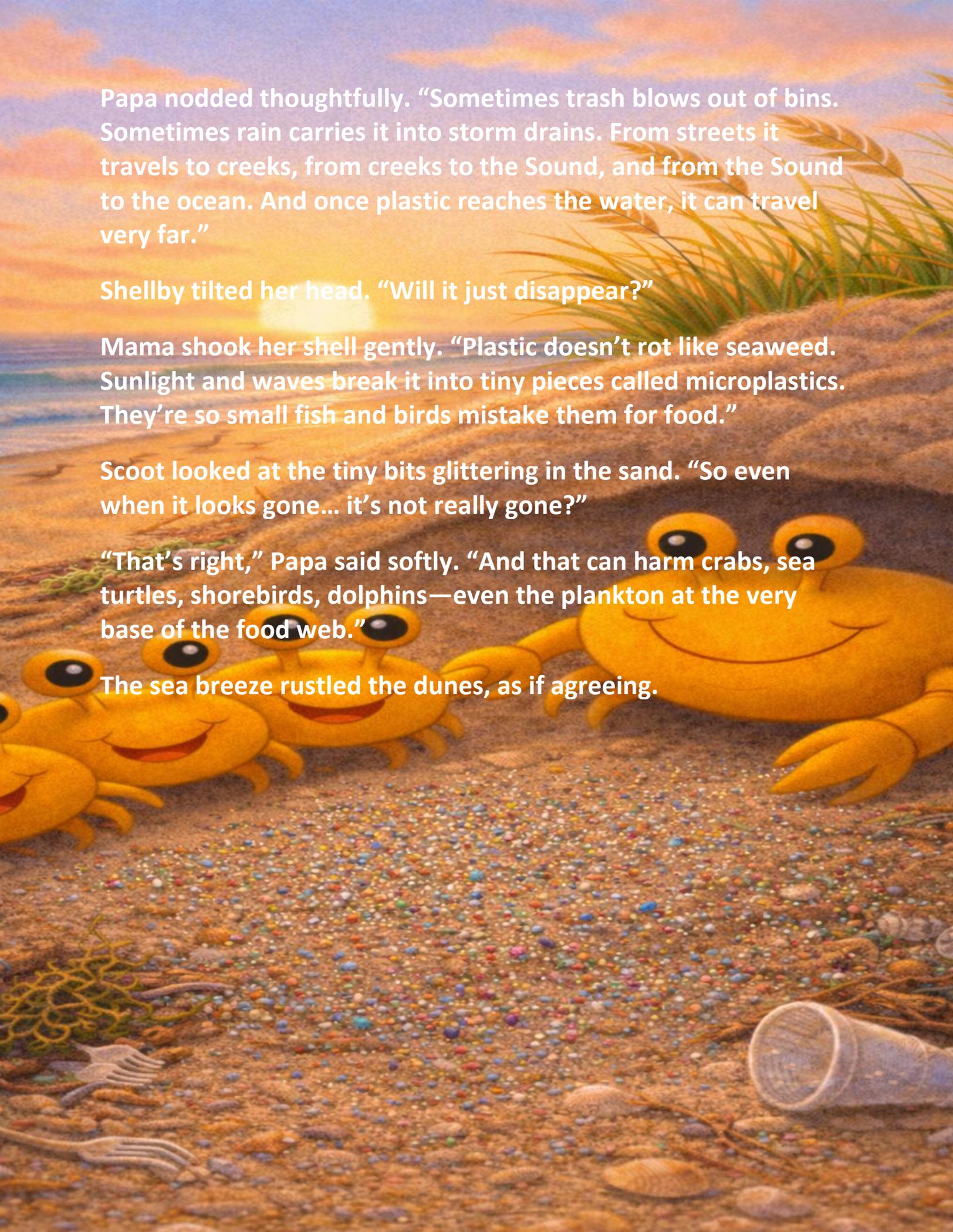
He stopped short.

“Mama... why are there so many plastic forks and cups mixed in with the shells?” he asked quietly. “They don't belong here.”

Mama Dunehopper walked beside him, brushing sand gently aside with her claw. “You're right, Scout. They don't belong. Many of these are single-use plastics—items used once and then thrown away.”

“But we threw ours in the trash,” Sandy said.



A vibrant illustration of a beach at sunset. The sky is a mix of orange, yellow, and blue. In the foreground, several cheerful yellow crabs with large black eyes are on a sandy beach. The beach is littered with colorful plastic beads and a white plastic cup. In the background, there are green grasses and a calm ocean under a bright sun.

Papa nodded thoughtfully. “Sometimes trash blows out of bins. Sometimes rain carries it into storm drains. From streets it travels to creeks, from creeks to the Sound, and from the Sound to the ocean. And once plastic reaches the water, it can travel very far.”

Shellby tilted her head. “Will it just disappear?”

Mama shook her shell gently. “Plastic doesn’t rot like seaweed. Sunlight and waves break it into tiny pieces called microplastics. They’re so small fish and birds mistake them for food.”

Scout looked at the tiny bits glittering in the sand. “So even when it looks gone... it’s not really gone?”

“That’s right,” Papa said softly. “And that can harm crabs, sea turtles, shorebirds, dolphins—even the plankton at the very base of the food web.”

The sea breeze rustled the dunes, as if agreeing.

Leading by Example

That afternoon, the Dunehoppers gathered inside their burrow kitchen.

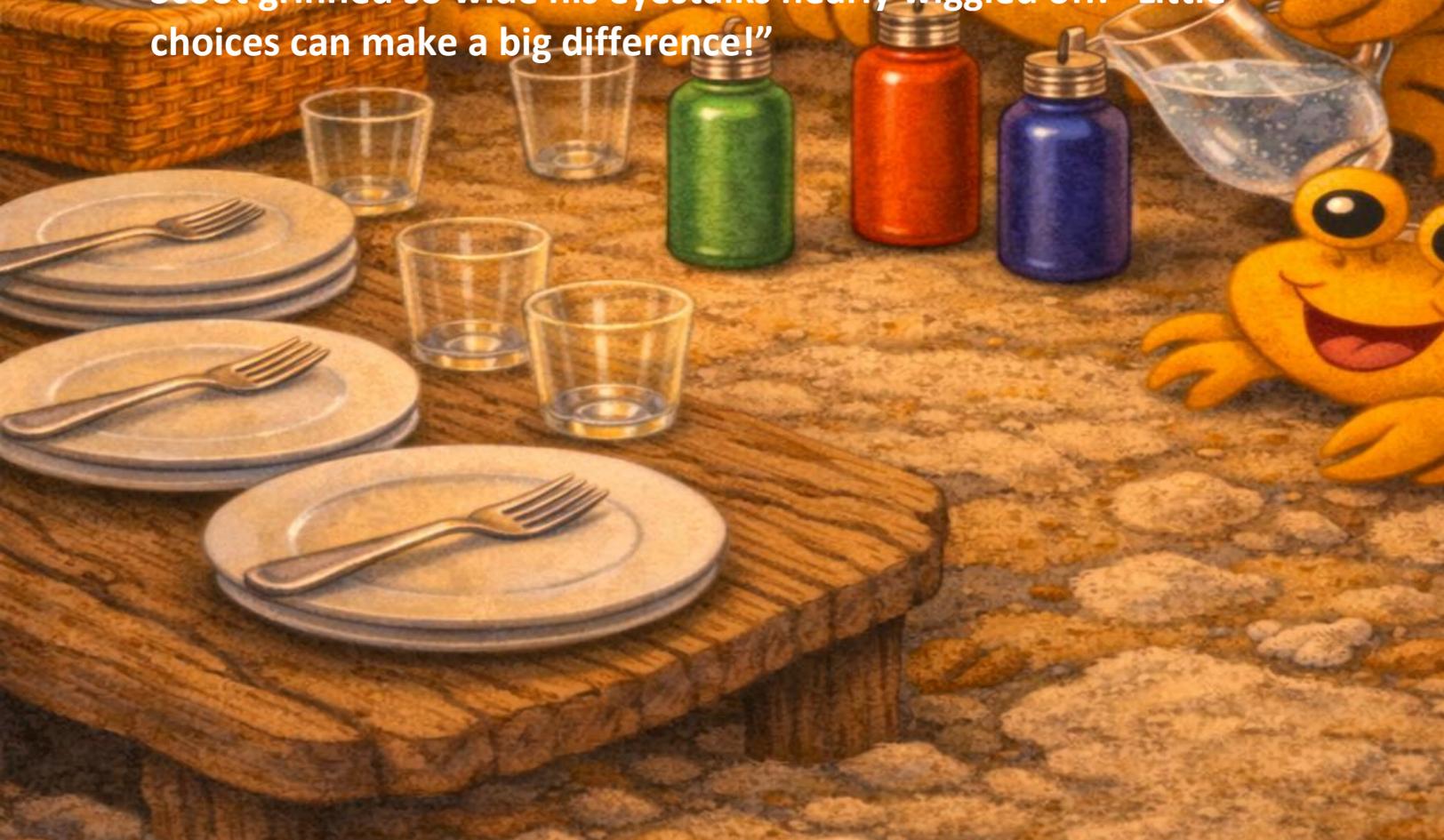
Mama opened a basket. Out came sturdy metal forks, ceramic plates, and glass cups.

“No more flimsy plastic for us,” she said cheerfully. “These can be washed and reused again and again.”

Papa filled each family member’s bottle with cool, filtered tap water.

“This comes straight from our local water system,” he explained. “It’s safe, it costs less than bottled water, and it keeps plastic bottles off our beaches.”

Scout grinned so wide his eyestalks nearly wiggled off. “Little choices can make a big difference!”



The next morning, Shellby helped Papa sew canvas shopping bags from strong sailcloth scraps. Sandy painted a bright sign in bold blue letters:

Reusable is Remarkable!

They hung it proudly near the burrow entrance.

Soon, neighbors began asking questions.

“Why the new bottles?”

“Why no plastic?”

“Do small changes really matter?”

And each time, the Dunehoppers answered kindly and clearly.



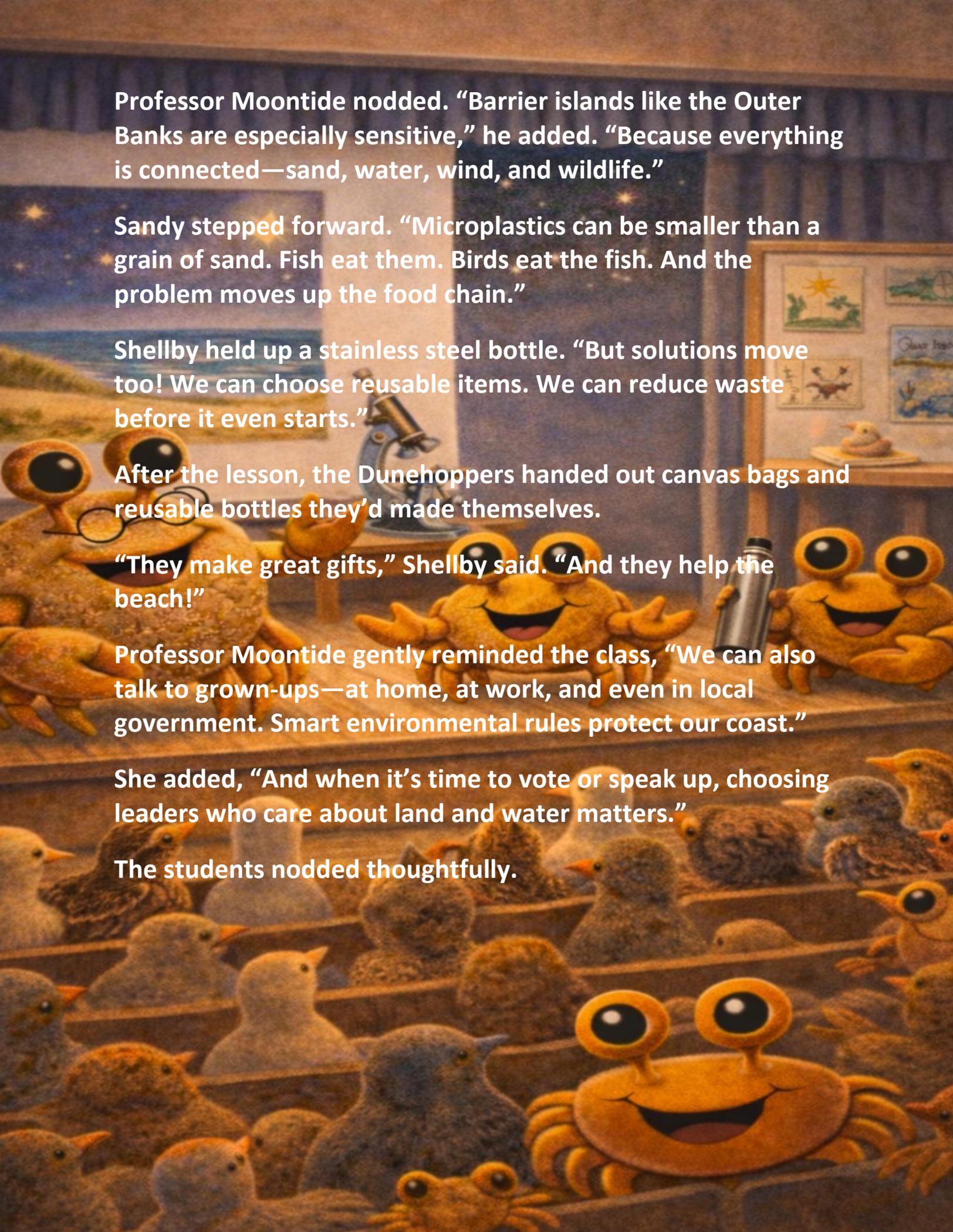
Science at Sea Oats School

At Sea Oats School, Professor Moontide invited the Dunehoppers to share their discoveries.

The auditorium buzzed with fluttering wings and clicking claws.

Scout stood tall and stated, "When plastic is thrown away the wrong way," he began, "it travels. Rain carries it downhill. Storm drains empty into creeks. Creeks flow into the Sound. And the Sound connects to the ocean."





Professor Moontide nodded. “Barrier islands like the Outer Banks are especially sensitive,” he added. “Because everything is connected—sand, water, wind, and wildlife.”

Sandy stepped forward. “Microplastics can be smaller than a grain of sand. Fish eat them. Birds eat the fish. And the problem moves up the food chain.”

Shellby held up a stainless steel bottle. “But solutions move too! We can choose reusable items. We can reduce waste before it even starts.”

After the lesson, the Dunehoppers handed out canvas bags and reusable bottles they’d made themselves.

“They make great gifts,” Shellby said. “And they help the beach!”

Professor Moontide gently reminded the class, “We can also talk to grown-ups—at home, at work, and even in local government. Smart environmental rules protect our coast.”

She added, “And when it’s time to vote or speak up, choosing leaders who care about land and water matters.”

The students nodded thoughtfully.

Becoming Advocates for the Shore

Inspired, the Dunehoppers joined a weekend beach cleanup. They sorted plastic, metal, and glass carefully.

“Recycling keeps materials in use,” Papa explained. “But reducing waste in the first place is even better.”

When Scoot noticed the nearby marsh had no cleanup scheduled, his eyes lit up.

“Why don’t we start one?”

So they did.

They invited neighbors. They made simple flyers. They partnered with Sea Oats School.

Soon, tiny crabs, birds, and even raccoons (supervised carefully!) worked side by side.



Mama also taught the children to read labels.

“Look for products made from recycled materials,” she said.

“Choose items with minimal packaging. Support local farmers so food doesn’t travel far wrapped in plastic.”

They visited the Dunes Market and bought strawberries from a nearby farm—no plastic clamshell needed.

Papa helped Scoot write a polite letter to a company:

Dear Friends,

We love your product, but we love the ocean too.

Please consider environmentally friendly packaging.

Small changes can protect big habitats.

With appreciation,

Scoot Dunehopper

Scoot sealed it carefully—with paper tape, not plastic.



A Shore Worth Protecting

That evening, as the sun dipped low over Pamlico Sound and the sky turned pink and gold, the Dunehoppers sat quietly at the edge of the tide.

The beach looked cleaner. The wrack line shimmered with shells instead of forks.

A pelican glided overhead. A ghost crab darted safely into its burrow.

“It didn’t take one giant action,” Sandy said thoughtfully.

“It took lots of small ones,” Mama replied.

Papa pressed his claw gently into the sand.

“When we lead by example, educate others, reduce waste, and speak up for the places we love,” he said, “we become advocates—not just for today, but for the future.”

Scout watched the waves.

“Even little crabs,” he whispered, “can help protect a big, beautiful world.”

And the shore—strong, shifting, and alive—seemed to smile back.



Did You Know?

Did you know that plastic doesn't disappear when it washes into the ocean? Instead, sunlight and waves break it into tiny pieces called microplastics — some smaller than a grain of sand!

On barrier islands like the Outer Banks, everything is connected:

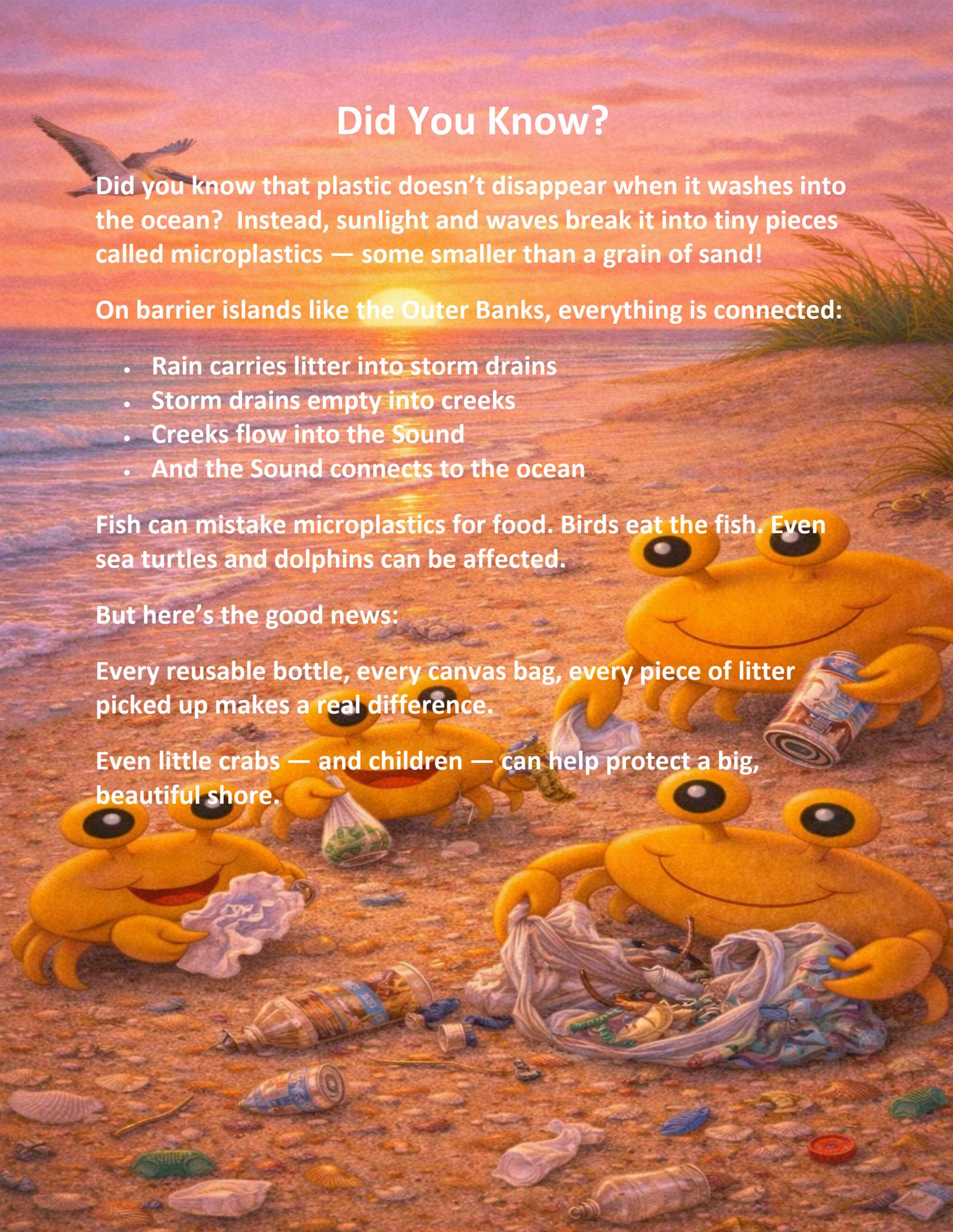
- Rain carries litter into storm drains
- Storm drains empty into creeks
- Creeks flow into the Sound
- And the Sound connects to the ocean

Fish can mistake microplastics for food. Birds eat the fish. Even sea turtles and dolphins can be affected.

But here's the good news:

Every reusable bottle, every canvas bag, every piece of litter picked up makes a real difference.

Even little crabs — and children — can help protect a big, beautiful shore.



References

Barnes, D. K. A., Galgani, F., Thompson, R. C., & Barlaz, M. (2009). Accumulation and fragmentation of plastic debris in global environments. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1526), 1985–1998. <https://doi.org/10.1098/rstb.2008.0205>

Environmental Protection Agency. (2023). *Reduce, reuse, recycle*. U.S. Environmental Protection Agency. <https://www.epa.gov/recycle>

National Oceanic and Atmospheric Administration Marine Debris Program. (2023). *What are microplastics?* <https://marinedebris.noaa.gov>

National Park Service. (2023). *Cape Hatteras National Seashore: Barrier island ecology*. U.S. Department of the Interior. <https://www.nps.gov/caha>

North Carolina Department of Environmental Quality. (2023). *Stormwater and marine debris in coastal North Carolina*. <https://deq.nc.gov>

Thompson, R. C., Olsen, Y., Mitchell, R. P., Davis, A., Rowland, S. J., John, A. W. G., McGonigle, D., & Russell, A. E. (2004). Lost at sea: Where is all the plastic? *Science*, 304(5672), 838. <https://doi.org/10.1126/science.1094559>

United Nations Environment Programme. (2021). *From pollution to solution: A global assessment of marine litter and plastic pollution*. <https://www.unep.org>