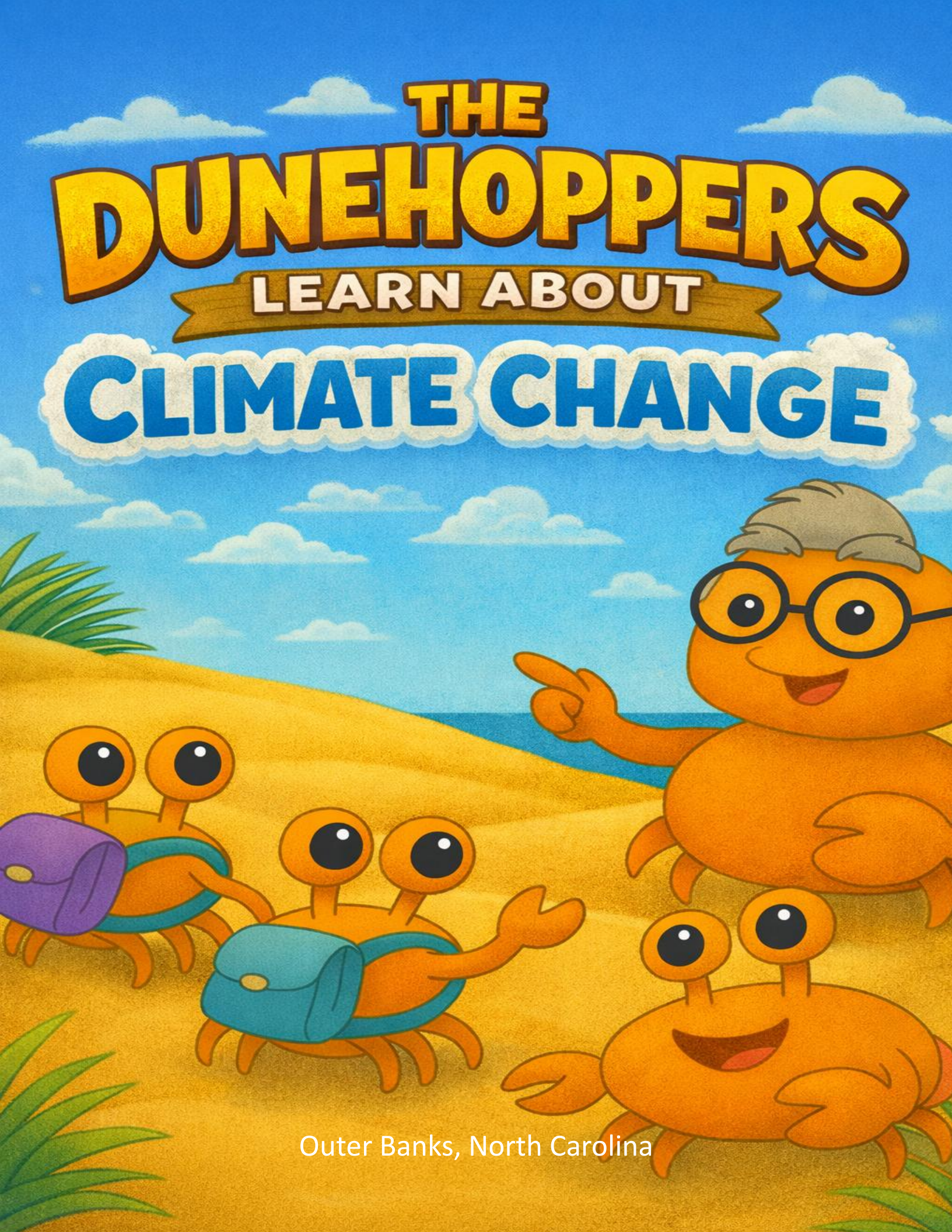

THE
DUNEHOPPERS
LEARN ABOUT
CLIMATE CHANGE
Outer Banks, North Carolina

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.

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

One breezy morning on the Outer Banks, the Dunehopper children scuttled toward Seaoat School, their backpacks bouncing and claws clicking with excitement.

Today's lesson was written in big shells at the front of the sandy classroom:

WHAT IS CLIMATE CHANGE?

Professor Driftclaw tapped the board gently.
"Climate change," he said, "means that Earth's weather patterns are changing over a long time. Some places are getting hotter, some are seeing stronger storms, and the oceans are slowly rising."

Scoot tilted his head. "Like when the tides don't behave?"

"Exactly," the professor smiled.

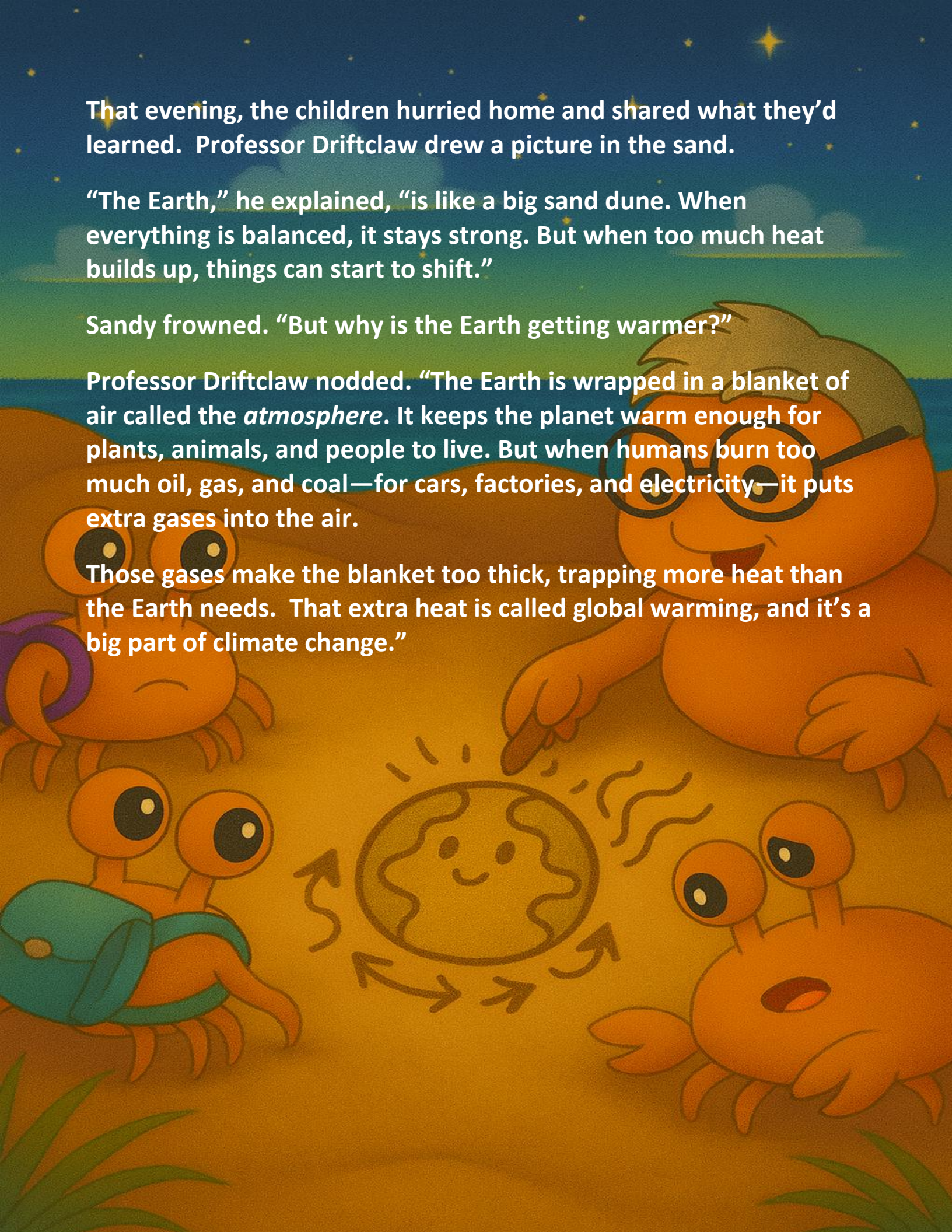
That evening, the children hurried home and shared what they'd learned. Professor Driftclaw drew a picture in the sand.

"The Earth," he explained, "is like a big sand dune. When everything is balanced, it stays strong. But when too much heat builds up, things can start to shift."

Sandy frowned. "But why is the Earth getting warmer?"

Professor Driftclaw nodded. "The Earth is wrapped in a blanket of air called the *atmosphere*. It keeps the planet warm enough for plants, animals, and people to live. But when humans burn too much oil, gas, and coal—for cars, factories, and electricity—it puts extra gases into the air.

Those gases make the blanket too thick, trapping more heat than the Earth needs. That extra heat is called global warming, and it's a big part of climate change."

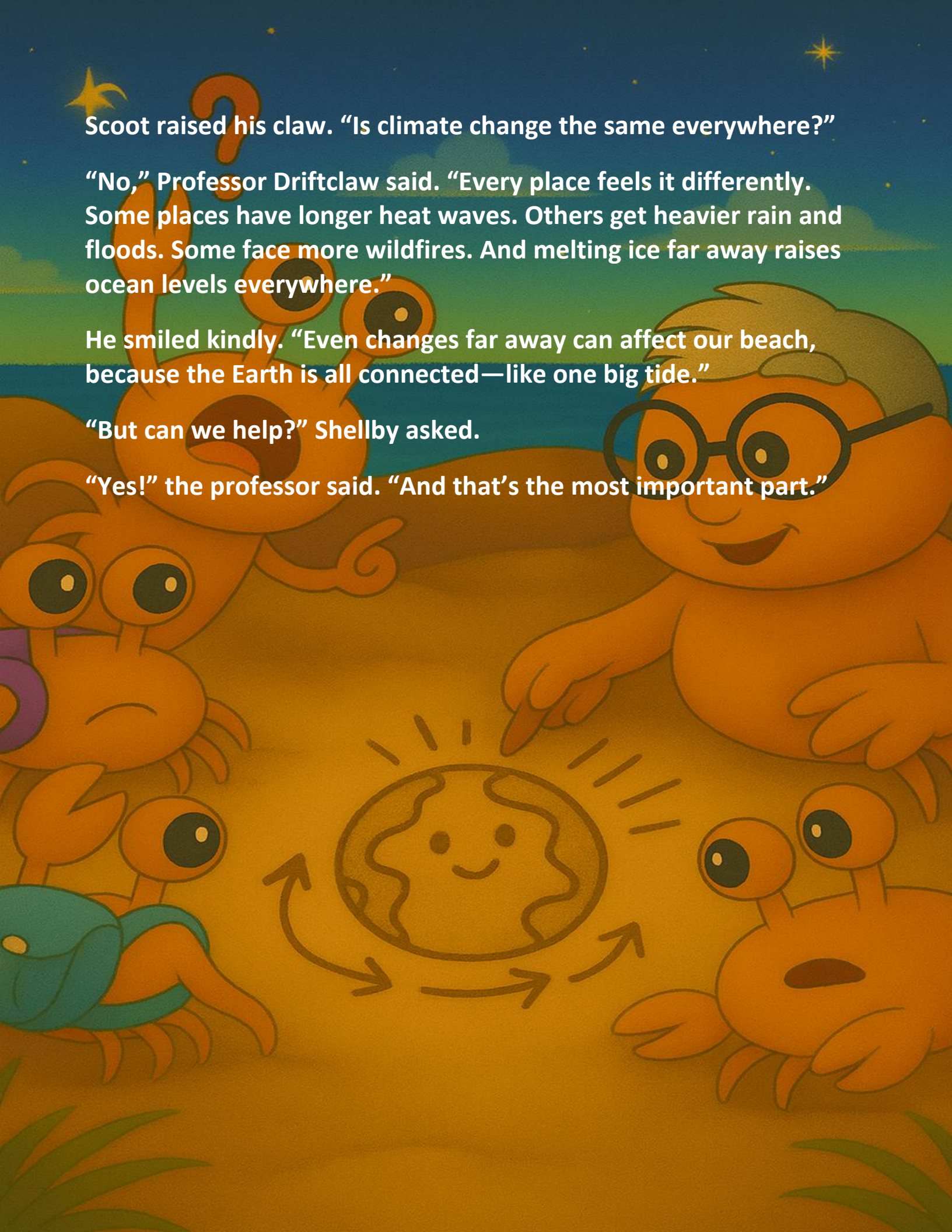


“For you Dunehoppers,” he said, “climate change can be especially tricky.”

He pointed toward the ocean. “Rising seas can wash away sand and make dunes smaller.”
He brushed his claw through the grass.
“Stronger storms can flatten dune grasses that hold sand in place.”
He shaded his eyes from the sun.
“Hotter, drier days can stress plants and animals.”
Then he looked at the burrows nearby.
“And losing dunes means losing homes for crabs, birds, and turtles.”

Sandy’s eyes grew wide. “Our dunes are our shield,” she said quietly. “They protect us.”

“Yes,” the professor replied. “And they protect humans too.”



Scoot raised his claw. “Is climate change the same everywhere?”

“No,” Professor Driftclaw said. “Every place feels it differently. Some places have longer heat waves. Others get heavier rain and floods. Some face more wildfires. And melting ice far away raises ocean levels everywhere.”

He smiled kindly. “Even changes far away can affect our beach, because the Earth is all connected—like one big tide.”

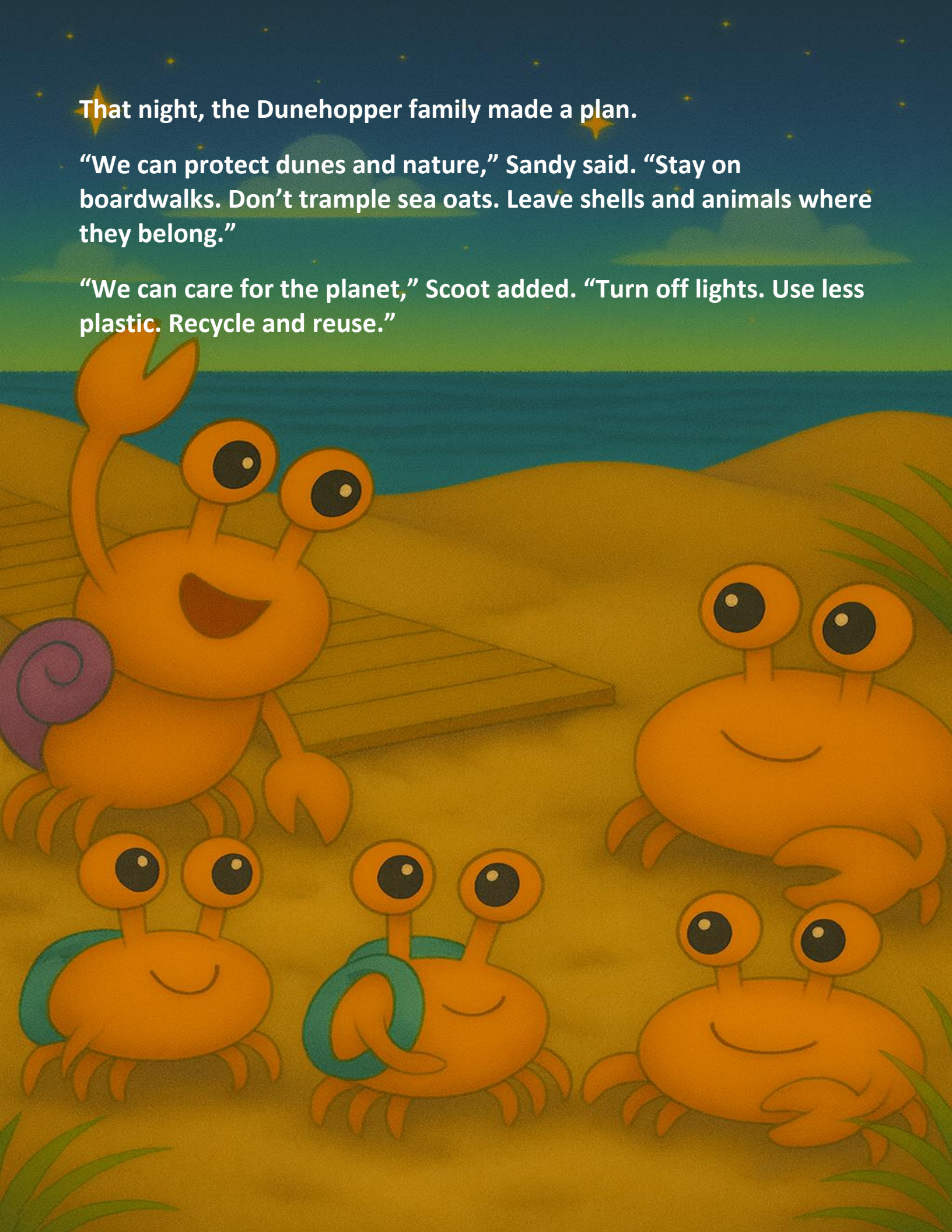
“But can we help?” Shellby asked.

“Yes!” the professor said. “And that’s the most important part.”

That night, the Dunehopper family made a plan.

“We can protect dunes and nature,” Sandy said. “Stay on boardwalks. Don’t trample sea oats. Leave shells and animals where they belong.”

“We can care for the planet,” Scoot added. “Turn off lights. Use less plastic. Recycle and reuse.”

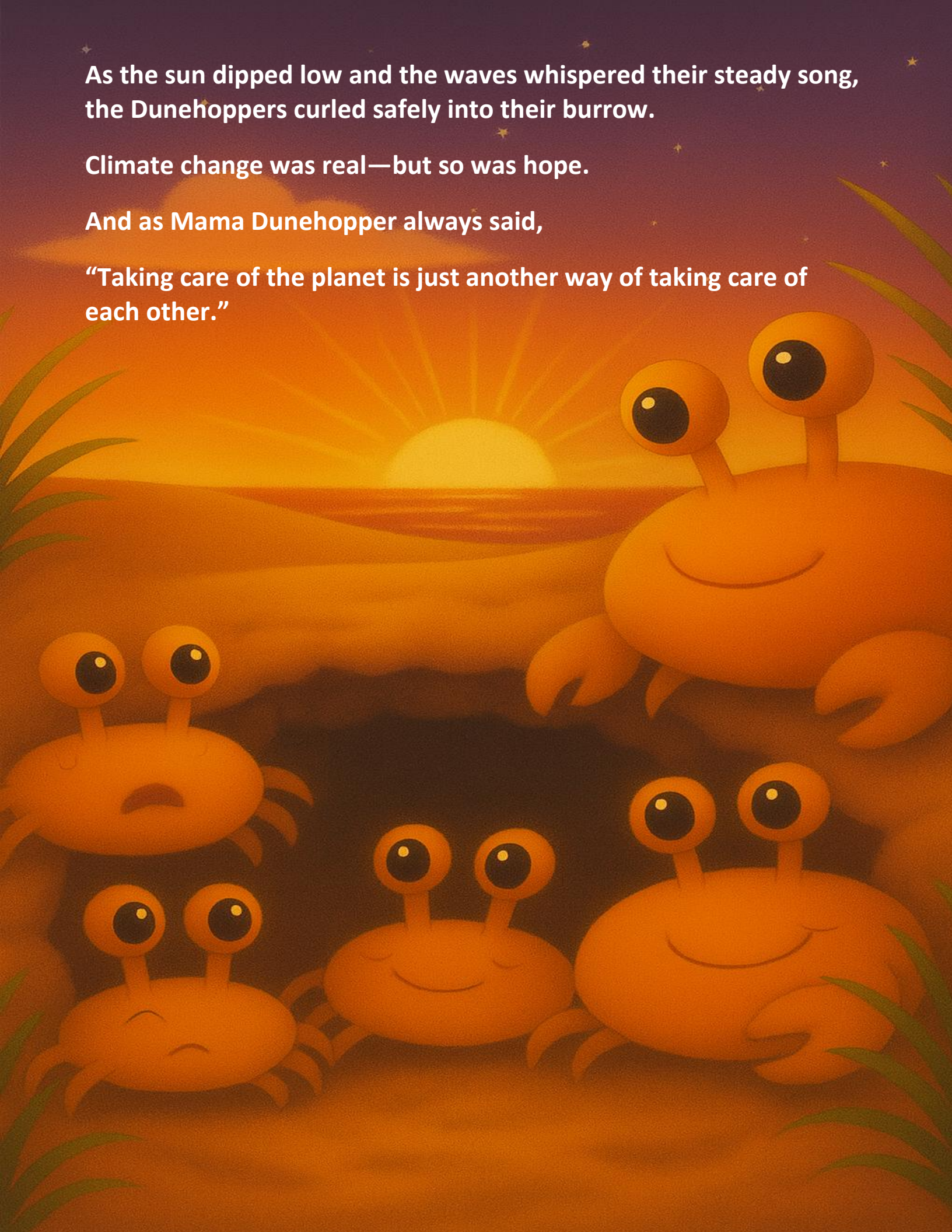


“And choose cleaner energy when possible,” Papa said. “We are converting our dunebuggy to electric. Also, walk or bike short distances. Support wind and solar energy.”

Papa smiled. “And don’t forget—share what you know.”

Scoot grinned. “So even little crabs can help a big planet?”

“Especially little crabs,” Papa said.



As the sun dipped low and the waves whispered their steady song, the Dunehoppers curled safely into their burrow.

Climate change was real—but so was hope.

And as Mama Dunehopper always said,

“Taking care of the planet is just another way of taking care of each other.”

Did You Know?

Did you know that the dunes are like nature's shields?

Sand dunes help protect beaches, animals, and even people from big waves and strong storms. When dunes are healthy, they hold the sand in place and keep homes—like the Dunehoppers' burrows—safe.

Did you know the Earth has a "blanket"?

The Earth is wrapped in air called the atmosphere. It keeps our planet warm enough to live on—just like a cozy blanket! But when people burn too much oil, gas, and coal, the blanket gets too thick and traps extra heat.

Did you know climate change is different everywhere?

Some places get hotter, some get more rain or floods, and others have stronger storms. Even melting ice far away can make ocean water rise near the beach—because the Earth is all connected.

Did you know children can help the planet too?

Turning off lights, using less plastic, walking or biking short distances, and protecting dunes all help the Earth. Just like the Dunehoppers, even small actions can make a big difference!