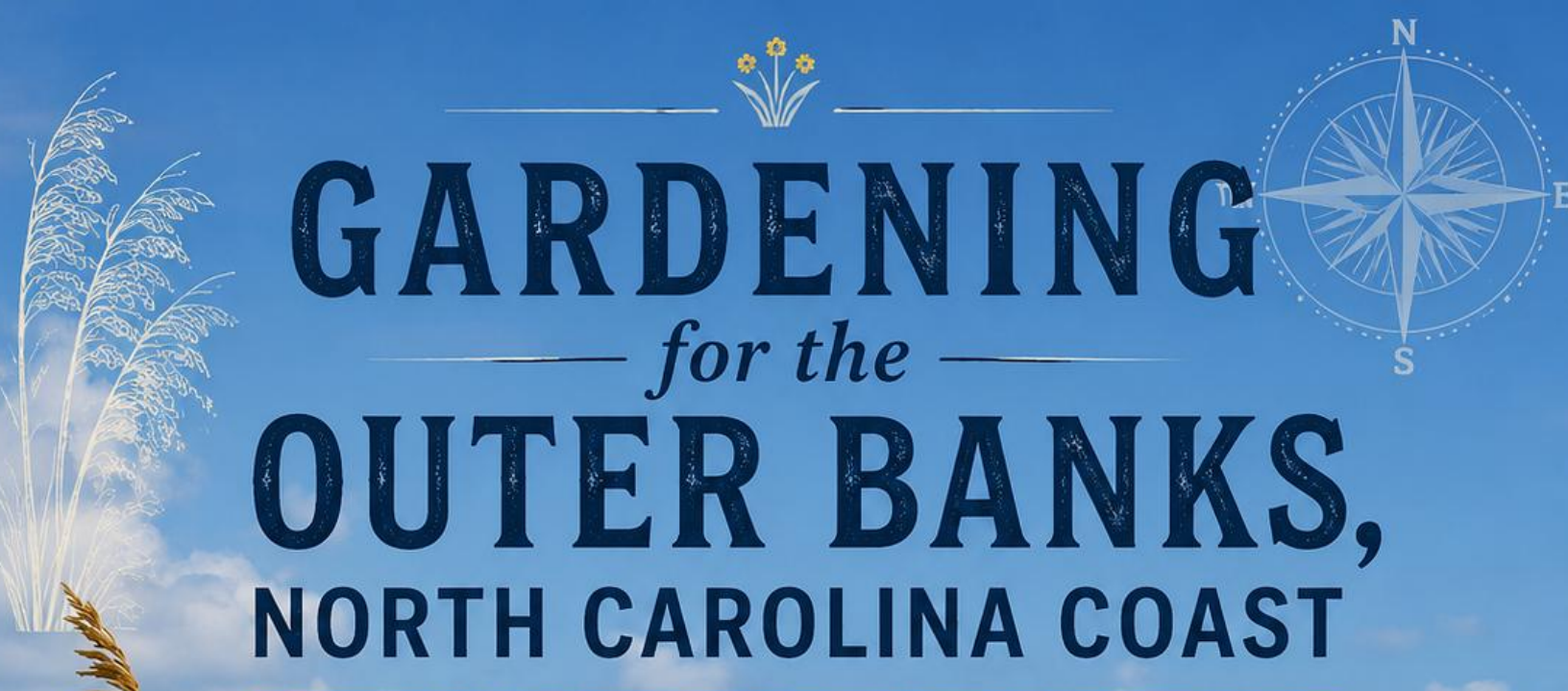




GARDENING *for the* OUTER BANKS, NORTH CAROLINA COAST

NATIVE PLANTS THAT PROTECT AND THRIVE
IN SAND, SALT, AND STORMS



BUILT FOR
COASTAL CONDITIONS



STORM-RESILIENT
LANDSCAPES



SUPPORTS WILDLIFE
& BIODIVERSITY



PROTECTS DUNES,
SOIL & WATER

SCIENCE-BASED • LOCALLY NATIVE • BEAUTIFUL • ESSENTIAL

Gardening for the Outer Banks, North Carolina Coast: Native Plants that Protect and Thrive in Sand, Salt, and Storms

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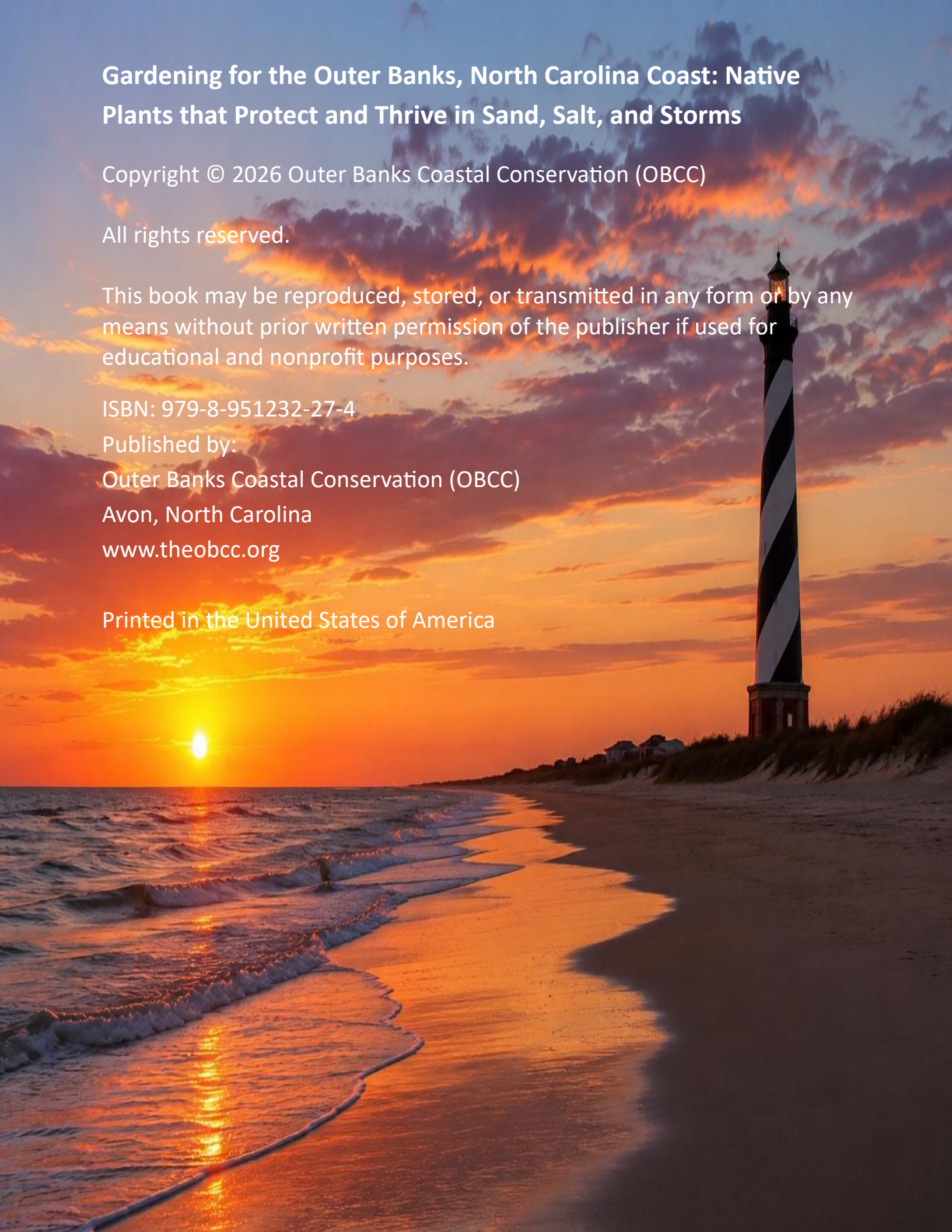
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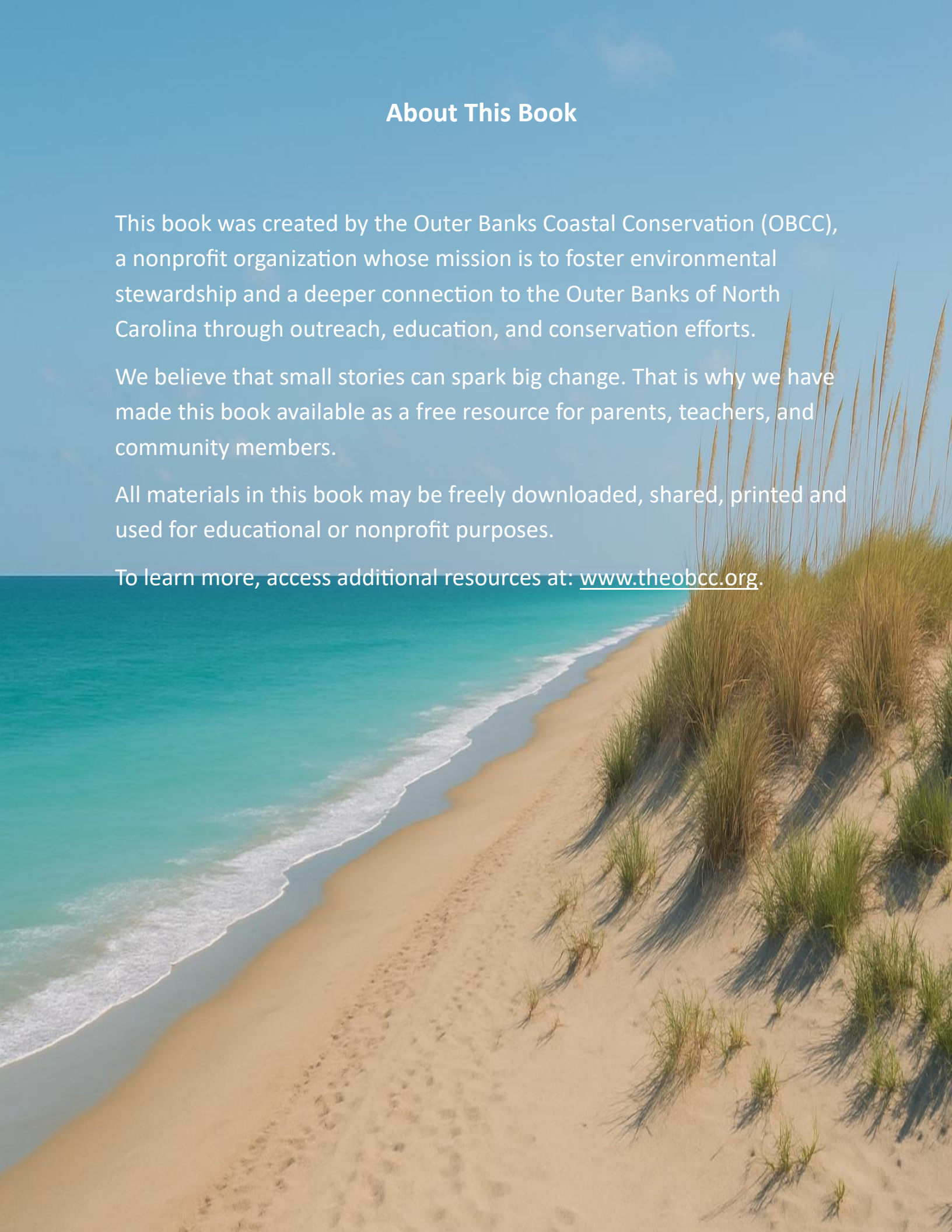
About This Book

This book 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.



Introduction: Gardening with the Wind, Waves, and Salt

The Outer Banks is unlike any other landscape on the East Coast — a string of barrier islands where land, sea, and sky constantly interact. Gardening here isn't about taming nature; it's about working *with* it.

The combination of salty air, sandy soils, high winds, and periodic flooding creates one of the most challenging — yet most rewarding — environments for coastal gardeners.

Native plants are the heroes of the coast. They:

- Hold dunes in place, preventing erosion.
- Provide food and shelter for birds, bees, and butterflies.
- Filter and clean stormwater runoff.
- Reduce the need for irrigation, fertilizer, and pesticides.

By planting wisely, homeowners can create landscapes that are both *beautiful and resilient*, strengthening the natural systems that protect the Outer Banks.

Understanding Coastal Ecology

Barrier Island Dynamics

Barrier islands are in constant motion — shaped by wind, waves, and storms. Sand is transported by ocean currents and wind, forming dunes and reshaping inlets. A healthy landscape mimics this natural movement with *flexibility*: grasses that bend, roots that hold, and plants that regenerate after storms.

Soil and Salt

Outer Banks' soils are mostly sandy and nutrient-poor, but they drain quickly. Salt spray and wind can dehydrate plants not adapted to these stresses. Native coastal plants evolved thick, waxy leaves and deep root systems to survive — making them perfect for your garden.

Garden Design Principles for Coastal Resilience

Layer Your Landscape

Create natural zones that transition from dune to inland yard:

- Frontline: Dune grasses and groundcovers to anchor sand.
- Mid-zone: Shrubs and small trees for wind protection.
- Backyard/Interior: Shade trees and flowering plants for pollinators.

Work with the Wind

Plant taller shrubs like *Wax Myrtle* or *Yaupon Holly* as living windbreaks to shelter delicate species behind them.

Capture and Filter Rainwater

In low-lying areas, install a rain garden using wet-tolerant natives like *Joe-Pye Weed*, *Pickernelweed*, and *Soft Rush*. These plants filter runoff before it reaches the sounds and marshes.

Build for Wildlife

Choose plants that bloom in every season — spring nectar, summer flowers, fall berries, and winter cover. Include native grasses, flowering perennials, and berry-producing shrubs to feed migratory birds and pollinators year-round.

The Dune & Oceanfront Zone

(Salt- and Wind-Tolerant Pioneer Species)

These plants are your first line of defense against erosion. Their root systems trap sand, build dunes, and form a living barrier against waves.

Common Name	Scientific Name	Description & Benefits
Sea Oats	<i>Uniola paniculata</i>	Signature dune grass; anchors sand; essential for dune stability; golden plumes add beauty.
American Beachgrass	<i>Ammophila breviligulata</i>	Fast-growing; ideal for dune restoration; spreads through rhizomes.
Seaside Goldenrod	<i>Solidago sempervirens</i>	Late-summer blooms for monarch butterflies; deep taproot stabilizes soil.
Bitter Panicgrass	<i>Panicum amarum</i>	Coarse grass forming dense clumps; drought-tolerant.
Beach Morning Glory	<i>Ipomoea imperati</i>	Low-growing vine; helps trap sand around plant roots.

Maintenance Tip: Avoid walking on planted dunes — foot traffic destroys root systems. Use walkovers or designated beach paths to protect vegetation.

Transition Zone (Between Dunes and Homes)

This is your *wind buffer* and *wildlife haven*. Plants here must tolerate both salt and some shelter.

Common Name	Scientific Name	Description & Benefits
Yaupon Holly	<i>Ilex vomitoria</i>	Evergreen with red berries; attracts songbirds; excellent for hedges.
Wax Myrtle	<i>Morella cerifera</i>	Fast-growing shrub that forms natural screens; supports warblers and nesting birds.
Muhly Grass	<i>Muhlenbergia capillaris</i>	Striking pink plumes in fall; stabilizes sandy slopes.
Dune Sunflower	<i>Helianthus debilis</i>	Sprawling groundcover; bright yellow blooms all summer.
Saltmeadow Cordgrass	<i>Spartina patens</i>	Excellent for erosion control on back dunes and marsh edges.

Tip: Mix textures — fine grasses with broadleaf shrubs — to slow wind and protect more delicate plants behind them.

Inland and Yard Zone (More Protected Areas)

Once past the dune line, soil and salinity stress lessen. Here you can grow small trees, flowering perennials, and ornamental natives that support pollinators.

Common Name	Scientific Name	Description & Benefits
Live Oak	<i>Quercus virginiana</i>	Iconic coastal tree; wind-resistant; supports hundreds of wildlife species.
Eastern Red Cedar	<i>Juniperus virginiana</i> var. <i>silicicola</i>	Salt-tolerant evergreen; provides dense cover for birds.
Beautyberry	<i>Callicarpa americana</i>	Arching branches with bright purple berries; wildlife favorite.
Black-Eyed Susan	<i>Rudbeckia hirta</i>	Long-blooming, cheerful native wildflower for pollinators.
Little Bluestem	<i>Schizachyrium scoparium</i>	Ornamental grass with bronze fall color; erosion control.

Note: Plant in clusters of three to five for visual balance and better pollinator attraction.

Rain Gardens & Wet Zones

Low areas in coastal yards often flood after storms. Turn these spots into *mini wetlands* using native plants that absorb and filter excess water.

Common Name	Scientific Name	Benefits
Pickerelweed	<i>Pontederia cordata</i>	Vibrant purple blooms; supports bees and butterflies.
Marsh Hibiscus	<i>Hibiscus moscheutos</i>	Large pink or white flowers; thrives in standing water.
Soft Rush	<i>Juncus effusus</i>	Dense clumps that hold soil in wet areas.
Joe-Pye Weed	<i>Eutrochium purpureum</i>	Tall pink flowers; late-summer nectar for butterflies.
Blue Mistflower	<i>Conoclinium coelestinum</i>	Spreads easily; covers damp ground; excellent for pollinators.



Seasonal Care and Maintenance

Spring:

- Trim back grasses before new growth.
- Test soil pH; add organic compost if needed.
- Replant any wind-damaged shrubs.

Summer:

- Water new plants deeply once a week until established.
- Remove invasives like Japanese honeysuckle or lantana.

Fall:

- Plant new perennials and shrubs — roots grow strong in mild fall weather.
- Collect native seeds for future propagation.

Winter:

- Leave dried stalks and seed heads for overwintering pollinators.
- Avoid cutting back everything — wildlife uses them for shelter.



Invasive Species to Avoid

Common Name

Pampas Grass (*Cortaderia selloana*)

Japanese Honeysuckle (*Lonicera japonica*)

Lantana (non-native varieties)

Chinese Privet (*Ligustrum sinense*)

Problem

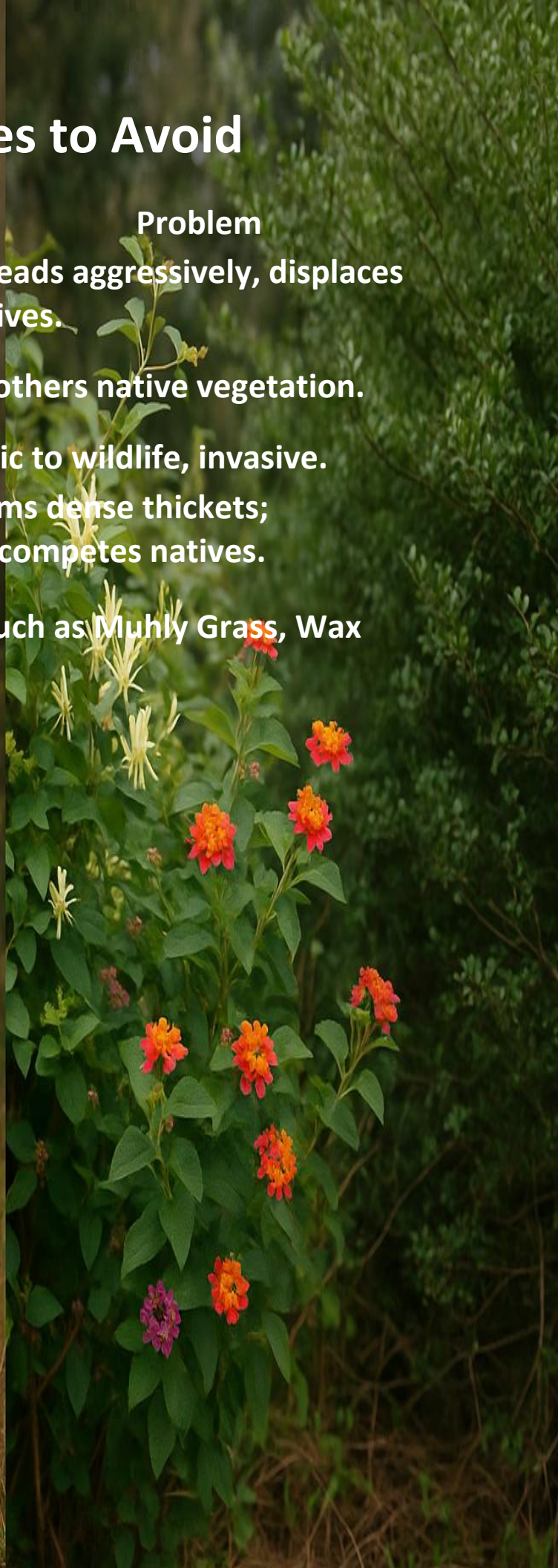
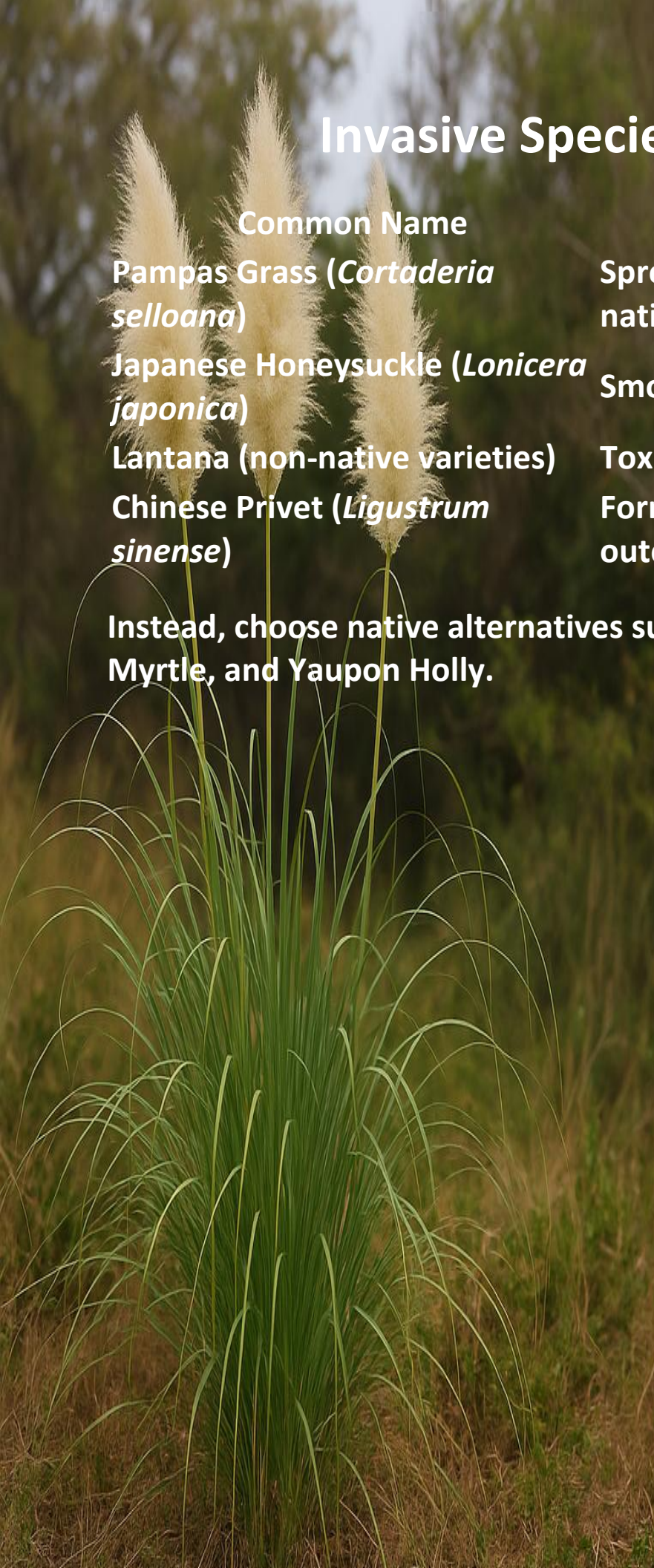
Spreads aggressively, displaces natives.

Smothers native vegetation.

Toxic to wildlife, invasive.

Forms dense thickets; outcompetes natives.

Instead, choose native alternatives such as Muhly Grass, Wax Myrtle, and Yaupon Holly.



Building a “Living Landscape”

- Plant in layers (groundcover → shrubs → canopy).
- Use native mulch to reduce evaporation and suppress weeds.
- Add bird baths, bee hotels, and nest boxes to enhance habitat.
- Compost yard waste instead of bagging it.

Together, these choices create a sustainable “living shoreline” — even inland — that strengthens your yard’s role in the barrier island ecosystem.



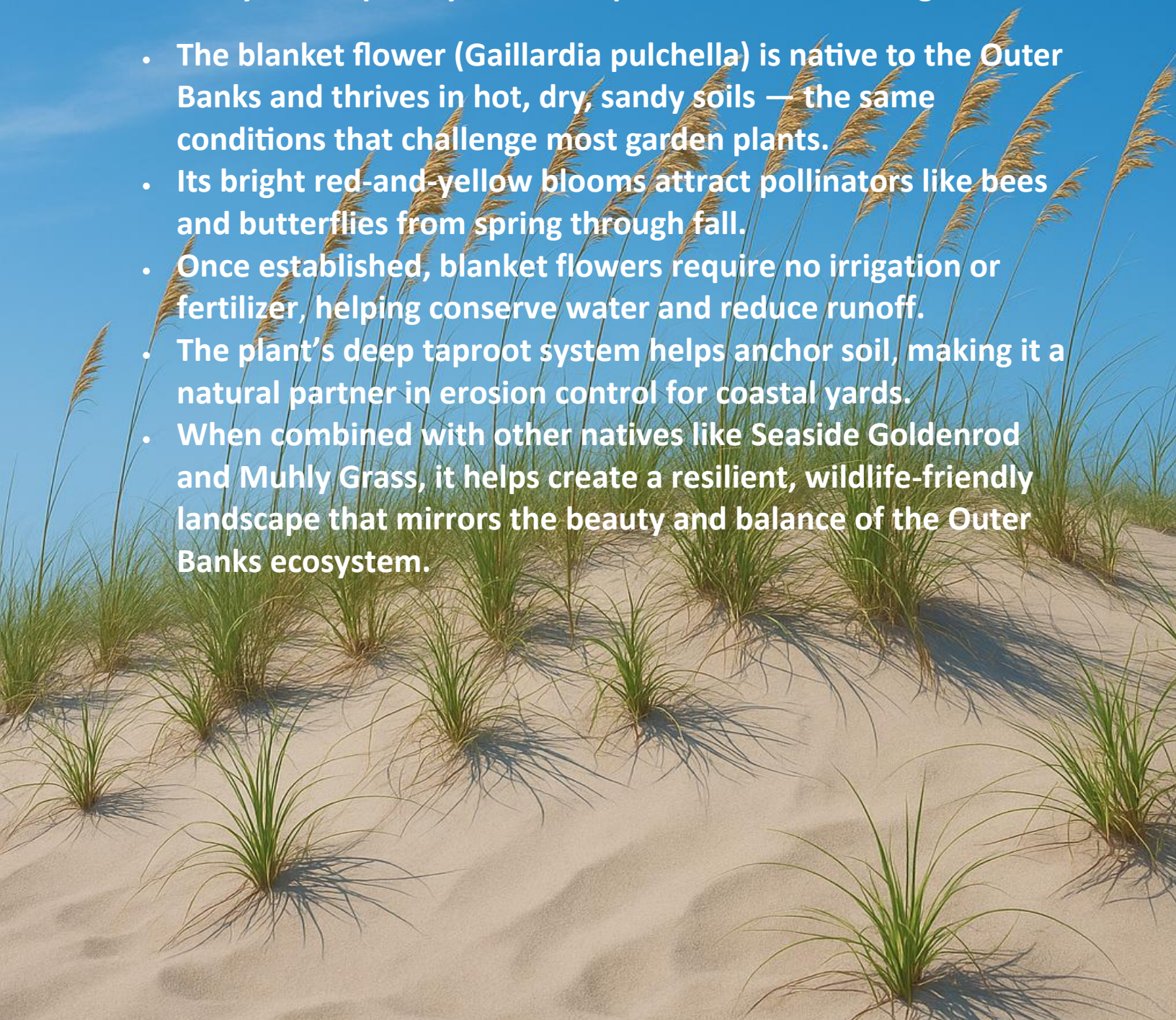
The background of the slide is a lush field of Gaillardia flowers, also known as blanket flowers. These flowers have a vibrant color gradient, starting with bright yellow at the tips of their petals and transitioning into deep orange and red towards the dark brown, textured centers. The flowers are growing on green stems with narrow, lance-shaped leaves. In the upper right corner, there is a circular inset that provides a close-up view of a single flower, highlighting the intricate details of its petals and the central disk.

Local Inspiration and Resources

- North Carolina Coastal Federation – nccoast.org
Programs on living shorelines, oyster gardens, and native landscaping.
- Dare County Extension Master Gardeners – Planting workshops and local plant lists.
- NC Native Plant Society – ncwildflower.org
Detailed native plant database by region.
- Audubon North Carolina Coastal Programs – Bird-friendly landscaping tips.
- Cape Hatteras National Seashore Resource Management –
Dune restoration and native vegetation guidance.

Did You Know?

- A mature Wax Myrtle hedge can block 60% of wind energy entering a property.
- Sea Oats roots can extend up to 30 feet, anchoring dunes through hurricanes.
- Planting a native buffer along driveways and ditches can reduce polluted runoff into sounds by over half.
- The Outer Banks once hosted vast maritime forests — and every native plant you add helps restore that heritage.
- The blanket flower (*Gaillardia pulchella*) is native to the Outer Banks and thrives in hot, dry, sandy soils — the same conditions that challenge most garden plants.
- Its bright red-and-yellow blooms attract pollinators like bees and butterflies from spring through fall.
- Once established, blanket flowers require no irrigation or fertilizer, helping conserve water and reduce runoff.
- The plant's deep taproot system helps anchor soil, making it a natural partner in erosion control for coastal yards.
- When combined with other natives like Seaside Goldenrod and Muhly Grass, it helps create a resilient, wildlife-friendly landscape that mirrors the beauty and balance of the Outer Banks ecosystem.



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Gardening for the Outer Banks, North Carolina Coast: Native Plants that Protect and Thrive in Sand, Salt, and Storms

This book helps homeowners and educators design resilient, wildlife-friendly landscapes adapted to the region's unique barrier island environment. It explains how native plants—such as sea oats, yaupon holly, wax myrtle, and muhly grass—stabilize dunes, reduce erosion, filter runoff, and support pollinators while requiring minimal maintenance. The book outlines layered landscape strategies from dune to inland zones, recommends rain garden species for flood-prone areas, and warns against invasive plants like pampas grass and Japanese honeysuckle. Emphasizing seasonal care, water conservation, and community stewardship, it frames gardening as a form of ecological restoration—creating “living landscapes” that mirror the natural rhythms and resilience of the Outer Banks ecosystem.

About the Publisher

Outer Banks Coastal Conservation (OBCC) is a nonprofit organization dedicated to fostering environmental stewardship and a deeper connection to the Outer Banks of North Carolina through education, outreach, and conservation initiatives.

Learn more and download free educational resources at:
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