Wrightsville BEACH MAGAZINE

September 2012 | Volume 13 Issue 9

Barrier island study

OPEN WATER Banks Channel Swimmers

BALD HEAD ISLAND'S Barrier Island Study Center

ANDY WOOD'S Beachcombers' Guide

EXTENSION

By Jamie Lynn Miller • Photography by Allison Potter

ature

ald Head Island is a model of a sustainable community, with a healthy, intact offshore barrier reef and a development philosophy of living in harmony with nature. With a similar perspective on preservation, architect Jay DeChesere and Barrier Island Study Center executive director Dr. Suzanne Dorsey have joined forces to help the island residents live most symbiotically with the surrounding environment. The Barrier Island Study Center is not only an example of how to build sustainably, in harmony with the environment; it's also a place to teach future generations how to proliferate this green mentality.

ON-SMOTINE



Live music every first and third Friday

September 7 Stardust-Jazz

September 21 The Imitations-Dance

www.airliegardens.org







ward-winning green architect Jay DeChesere has always placed a strong premium on living efficiently, sustain-

ably and in harmony with the natural environment, from a small dorm room at the University of Kentucky, to rainwater harvesting around the house in the Bahamas.

With the design of the Barrier Island Study Center, DeChesere incorporates the surrounding natural environment and illustrates how development can complement the natural habitat.

"My goal through the Bald Head study center is to show the community how to build green and live sustainably, while respecting the environment throughout the entire process," DeChesere says. "We tried to use local and regional materials from within a 500-mile radius. This not only helps the economy, but it reduces the carbon footprint, as well. It was hard, though, given Bald Head's location on a point in the ocean; the 500-mile radius was about two-thirds what it would have been if it would've been elsewhere. I probably could've used some seaweed," he says.

As it stands, the center reflects and respects the abundance of the natural habitat. Its roof merges with the





EDUCATION

THE WAY IT

Above, Staff welcomes visitors to the center's two-story lobby, which features maritime vegetation in a ground-level planter nourished by sunshine from an upper-story skylight. The open staircase, partially made from Cape Fear Riverwood, winds toward the library, meeting rooms and staff offices. Right, A summer camper reads in the library in front of a case containing books about wildlife, the environment and gardening. Opposite page, This sculptural, education system creates interest, noise and movement while illustrating how rainwater is collected from gutters then channeled into collection systems for reuse.

CONSERVANCY

www.wrightsvillelsen.hnug

Kendyll Goeman, environmental educator, teaches a group of children about marine creatures like spider crabs, bottom, and whelks, below, during touch tank time.

TEACHING



windswept vegetation, structurally and visually, like an extension of the surrounding maritime forest; inside, there are ceilings made from recycled cotton, which maximize the acoustics for the teaching environment, and occupancy sensors that automatically extinguish the lights if a room is empty for more than 15 minutes. Even the flooring material was recovered out of the nearby river.

"During the logging operation of the 1700s, big pieces of timber would sometimes fall overboard. They've started to harvest these timbers from the Cape Fear River, ten miles away," DeChesere says. "We used this wood to build the floors and handrails throughout the center. Some of them still have the king's stamp on them."

He is passionate about the environmental benefits of natural, drought-tolerant landscaping, so integral to this green building process.

"Bringing in foreign plants and trees, like the mimosa, means that insects and birds won't interact with it naturally, and so the whole ecosystem is affected," he says. Instead, he placed an emphasis on leaving the look and beauty of the maritime forest intact by preserving the center's big live oak.

"People are displacing nature in the world. We've disconnected the pathways that animals have used to communicate and move about the land, with our highways, development and roads," he says.

"But how do we get people to care? It's all about education. Really, it'll start with little kids who will be educated: They'll understand the effects of sustainable practices on the environment, and they'll ask for it into the future. They won't allow the opposite to happen."

KIDS CAMPS



A group of interns with the Bald Head Island Conservancy inventory one of numerous sea turtle nests that hatched this summer.

Dr. Suzanne Dorsey agrees, "Our kids camps focus on both getting kids into nature and developing an appreciation for it. We also have guided nature tours, with a special look at some natural habitats on the island. We educate over 20,000 people a year."

Founded in 1983, the Bald Head Island Conservancy pledges to "foster community-based barrier island conservation," and as such, the BHSC is devoted to finding practical, community-based solutions to growing conservation challenges.

"The long-standing decision in this community is that all development needs to be in harmony with nature," says Dorsey, who has been with the center since 2004. "The consensus seems to be to protect the maritime forest at all costs; by protecting the maritime forest, the healthy barrier environment remains intact. It grows the elevation of the island, prevents over-wash and ultimately maintains a natural buffer against storm[•] systems to shelter not only the island, but Sunny Point, the power plant and the mainland," she explains.

With a firm grasp on the forest, the community's top priority, Dorsey and her staff set out to measure the community's caring capacity regarding hot-button topics like the white-tail deer population.

"Do they care because the deer eat their roses? Do they think killing deer is wrong? And are they opposed to killing deer because of the safety issue, or the moral issue? It's about measuring people's caring capacity. And then we try to reach a consensus. Because with consensus, comes conservation."

"We've been able to do a study that gives a number: When the deer count is less than 200, there's no measurable impact

NATURE TOURS

september 2012



on the maritime forest. We do plus and minus; we have initial meetings; we talk about the complexity. And people tell me they love me or hate me." She pauses and then laughs. "Oh yes, it gets very heated!"

And of course, there are the turtles.

"We're working with UNCW to protect the sea turtles; the preservation efforts actually started about 30 years ago," Dorsey says. "We're the index beach for North Carolina — we stay up all night and patrol all the beaches to tag the females and monitor them for conservation purposes. We have the highest hatching rate,"



THE Lea/Schultz law firm

Honest advice from the start Experience to take care of your needs

When dealing with divorce, separation or any other family law matter, a lot is at stake. Your case demands talented, experienced litigators who are dedicated to protecting your rights.

> Experienced North Carolina Family Law and Business Litigators

> > BEST Super Lawyers

THE LEA/SCHULTZ LAW FIRM, P.C. 1131-B Military Cutoff Road, Wilmington, NC 28405

thelealawfirm.com • t: 910-239-5990 • f: 910-239-5992









she says, like a proud mother. "We hatch out more babies than everyone else, and our turtle mortality rate is the lowest in the state."

Educational kids programs include touch tanks, also designed by DeChesere, and provide children the tools to make an individual impact on conservation. "We try to show the kids things they can do within their control.

RESEARCH

Simple things, like just changing a behavior; for example, we teach them to pick up a plastic bag. Or encourage their parents to stop using plastic bags. Or cut back on bottled water. It doesn't need to be life-changing effort; it just needs to be a choice. Because if you make one choice, you'll be inspired to make another choice."

While it's easy to get kids to care about turtles, how does Dorsey reach adults, different interest groups and the largely socially and politically conservative constituency of Bald Head? It's all about knowing the pressure points.

"I don't talk about the spiritual aspect of the forest," Dorsey says. "I talk financial issues, like storm insurance, which often doesn't pay out after a disaster. But if we invest in the natural habitat, if we preserve those forests, it will pay. People view their homes as a multigenerational investment, a place where kids and grandkids can

gather across the ages; so I get them to look 25, 40, 100 years down the line. And we will have a real plan, with practical solutions."



Resources

ARCHITECT Jay DeChesere, AIA, LEED AP

BUILDING CONTRACTOR Adams Southeastern Construction

LANDSCAPE ARCHITECT Lara Berkeley, B+O Designs

INTERIORS Jennifer Kraner, Big Sky Design

CIVIL ENGINEER McKim and Creed

MECHANICAL AND ELECTRICAL ENGINEER MCBH, Consulting Engineers

CLEARING Talton's Clearing & Grading

SIPs INSTALLATION, FLOOR SYSTEMS GreenCreek Homebuilders

WINDOWS, DOORS, WOOD PRODUCTS Builders First Source, Southport

SHEETROCK American Drywall

FLOOR PANELS Atlantic Glass

TRUSSES ComTech, Inc.

RETAINING WALLS Connaway Marine Construction

CARPETING Crystal Carpet

FOAM INSULATION Eastern Insulation

ELECTRICAL Elite Electric

STANDING SEAM ROOFING Highland Roofing

SITE DRAINAGE PIPING HRH Construction Products

FIRE PROTECTION SYSTEM J&D Sprinkler Company

PLUMBING FIXTURES Longley Supply, Ferguson Enterprises

CUSTOM STAIRS AND LANDINGS MNC Metal Designs

HEATING AND COOLING Nance's Heating and Air

WOOD FLOORING MATERIALS Old Growth Riverwood

CASEWORK Pridgen Woodwork

PLUMBING AND RAINWATER HARVESTING Signature Plumbing

CARPET TILES Southeastern Flooring

EXTERIOR/INTERIOR TRIM, SIDING AND DECKS Solid Foundation Builders

WOOD DECKING MATERIALS Special Wood

PAINTING Pinnacle Finishes

TRASH REMOVAL Waste Management

WOOD FLOOR SEALING TimberWolf Flooring



Exalting the Lore Through praise, worship and hymns

POINT OF GRACE PAUL BALOCHE 4 HIM JARS OF CLAY MICHAEL W. SMITH MERCYME STEVEN CURTIS CHAPMAN CHRIS AND CONRAD SIDEWALK PROPHETS



To receive a free bumper sticker or sponsorship information:

THE DOVE 89.7 FM PO Box 957 • Wilmington, NC 28402 Tel: (910) 763-2452 Fax: (910) 763-6578 www.life905.com • life@life905.com

