

Beach Problems

By Jim Scanlon

North Carolina, including Bogue Banks, continues to struggle with the health of its beaches and the future of its barrier island beach communities. For good or for ill, the acts of nature and of man will shape the ultimate outcome of this struggle. An outcome that today is far from certain.

On Bogue Banks, nature regularly challenges the health of beaches in Atlantic Beach, Emerald Isle, Indian Beach and Pine Knoll Shores alike. Within the past decade, for example, hurricanes Floyd and Ophelia caused substantial erosion of most beaches. Rising sea levels brought negative shoreline change to some areas of the island, especially at Fort Macon and Pine Knoll Shores. Hurricanes remain an annual threat to beach volume. Increasing sea levels, allegedly because of global warming and polar ice melt, are predicted by many scientists to be a long-term danger to maintaining the shoreline.

But nature is not the only threat to the beaches of Bogue Banks. Historically some aspects of human development of the island ignored the long-term sustainability of the shoreline. More recently certain policies and practices of the Corps of Engineers have exacerbated beach erosion. This is especially true of the corps' practice of dumping one million cubic yards of grade A sand (dredged each year from the entry channel to the Morehead City port) well offshore, effectively short-circuiting nature's own process of nourishing the beaches of the island.

Local efforts to blunt, if not reverse, the negative effects on the shoreline by both natural and human forces intensified during the past decade. The towns on the island spent almost \$30 million to preserve the beaches for the use of both residents and tourists.

Federal, state, and municipal governments strengthened regulations that affect development and the status of the shoreline. Intense efforts are underway to promote better cooperation between the Corps of Engineers and island municipalities to

foster beach health in the future.

Recent efforts appear to have produced mixed results. Beach sand volume in all the communities on Bogue Banks is greater today than in 1999, though in some instances less than it was in 2006 or 2007.

Since 2007 shoreline change has been positive for most communities, moving the shoreline seaward as much as 24 feet, for example, in Atlantic Beach. On the contrary, Fort Macon and eastern Pine Knoll Shores have seen their shoreline move 13 feet landward. What the next decade and beyond will bring to the beaches of Bogue Banks is a matter of debate.

The long-term prognosis for the shoreline of coastal North Carolina, including Bogue Banks, remains uncertain. Some scientists clearly believe that the state's coastal communities are, to one degree or another, in a "crisis" situation. This is the conclusion of a white paper recently issued by members of the North Carolina Coastal Geology Cooperative Research Program, led among others by researchers at East Carolina University.

According to the report accelerating climate change and rising sea levels urgently call for new long-term management plans for the state's coastal areas. These plans need to be both realistic and visionary. Realistic in recognizing the futility of disrupting natural coastal processes and in reversing the worst aspects of coastal development; visionary in seeing the challenges of coastal change as true opportunities for building a better future for residents, businesses and visitors alike.

The white paper expresses particular concern for historic development trends affecting the barrier islands north of Cape Lookout. In the view of the researchers the traditional approaches to infrastructure construction (bridges, roads, barrier dunes), beach management (hardening, sandbags, nourishment), and inlet management (closing, hardening, dredging) are

counterproductive and ultimately fruitless against natural barrier island dynamics on the state's northeastern coast.

Instead the report calls for a series of steps to reorient development north of Cape Lookout. The researchers would discourage expansive business and residential growth on the barrier islands.

They would further encourage the reversal of much existing development. Their proposals would focus business development in mainland coastal towns and recreation on the Outer Banks themselves, including eight Ocracoke-type destination villages across the islands.

With this new approach they believe that the northeastern barrier islands could truly become North Carolina's "string of pearls."

The researchers consider the coastal islands south of Cape Lookout to be "islands of opportunity." They view them as amenable to something resembling traditional development, contingent on the economic viability of beach renourishment for the individual island.

Even in the southeast, however, they suggest a new approach to long-term development. Among other things they recommend not replacing old bridges, making some islands automobile-free, raising the height of residential and commercial buildings to allow the natural processes of overwash and island-building, and protecting marshes on the sound side of the islands to permit natural island evolution. Their recommendations for the barrier islands south of Cape Lookout are less dramatic than those for the coastal islands north of the Cape.

The apparent challenge for Bogue Banks and for coastal North Carolina is to plan intelligently, with openness to new ideas, in building its future. Only intelligent planning will enable barrier island communities to secure an excellent future for their beaches and themselves.

You think English is easy???

Read to the end . . . a new twist

- 1) The bandage was wound around the wound.
- 2) The farm was used to produce produce .
- 3) The dump was so full that it had to refuse more refuse.
- 4) We must polish the Polish furniture.
- 5) He could lead if he would get the lead out.
- 6) The soldier decided to desert his dessert in the desert.
- 7) Since there is no time like the present, he thought it was time to present the present
- 8) A bass was painted on the head of the bass drum.
- 9) When shot at, the dove dove into the bushes.
- 10) I did not object to the object.
- 11) The insurance was invalid for the invalid.
- 12) There was a row among the oarsmen about how to row ...
- 13) They were too close to the door to close it..
- 14) The buck does funny things when the does are present.
- 15) A seamstress and a sewer fell down into a sewer line.
- 16) To help with planting, the farmer taught his sow to sow.
- 17) The wind was too strong to wind the sail.
- 18) Upon seeing the tear in the painting I shed a tear.
- 19) I had to subject the subject to a series of tests.
- 20) How can I intimate this to my most intimate friend?

Let's face it - English is a crazy language. There is no egg in eggplant, nor ham in hamburger; neither apple nor pine in pineapple. English muffins weren't invented in England or French fries in France. Sweetmeats are candies while sweetbreads, which aren't sweet, are meat. We take English for granted. But if we explore its paradoxes, we find that quicksand can work slowly, boxing rings are square and a guinea pig is neither from Guinea nor is it a pig.