

December 2021

Dear Friend of Orenda,

If you love turtles, science, nature, or a great mystery, you're going to love this story ... and you'll be surprised at your role in it!

While my concern for our conservation projects is most urgent, I need to quickly invoke a few important zoological and geological timelines.

Your enclosed Orenda newsletter highlights three important land and wildlife protection

projects.....two for critical habitats and one for a threatened species. I'll turn to the Diamondback Terrapin first, and then to our two new wildlife Sanctuaries.



Regarding the natural history and origins of terrapins, I turn to the writings of Dr. Barbara Brennessel. She suggests looking back two million years when science speculates that aquatic and terrestrial reptiles first started a physiological transformation to hard shell turtles. But let's look a bit closer, say back to the Pleistocene epoch, about 1.65 million years past; that's the approximate date that scientifically

identified Diamondback terrapin fossils were found at Edisto Beach, along the coastal plane of South Carolina.

Our region's geological history began about 23,000 to 15,000 years ago with the advance and retreat of New England's most recent glacial period. That's when the Laurentide icesheet once covered all of what is Cape Cod, down to the southern coasts of present-day Martha's Vineyard and Nantucket. As the Laurentide glacier melted and retreated, sand and geologic debris were deposited. The melting icesheets, releasing torrents of water and mixing with the rains and winds, transformed the sand and glacial moraine into the (geologically) early Cape Cod landscape.





From about 10,0000 to 6,000 years ago, when raising ocean levels brought seawater to the Cape's nooks, crannies, tidal bays, streams, and marshlands, two very important natural events began occurring. The vast expanse of Cape

Cod coastal forests and estuaries began bursting onto the scene, and Diamondback Terrapins began laying eggs in the dry, sandy, lightly vegetated areas just beyond the marsh water's edge. And since that time, they have been returning every year, to repeat the cycle of life.

Preserving Land. For Our Woods, Wildlife, Waters, and Winds. For Everyone. Forever.

Now let's go back just 200 years ... that's when we began to destroy it all.

Southeastern Massachusetts settlers and citizens were part of an exploding human occupation that resulted in dramatic land use impacts and clashes with indigenous peoples. In 1816, the cranberry industry was established. Ten years later came the first American railroad. From the 1830's until just after the Civil War, Cape Cod farming, livestock and forest clearing peaked. Then came the human invasion for preferential coastal homes



and homesteads. The construction of the Mid-Cape Highway in the 1950s brought a dramatic increase in the number of visitors and an ever-increasing intensity of "development," from the tourist trade to the demand for house lots, strip malls and marinas.

During these 200 years, Diamondback Terrapins were driven almost to extinction by the adverse impacts of human settlement, including their consumption as a culinary delicacy in the early 1900's (now illegal), habitat loss from land development, fouling of water and air, and as bycatch in the crab and lobster pots of coastal fishermen. All tolled, this constituted a frontal assault on marine, aquatic, terrestrial and avian wildlife.



Orenda's mission, begun in 1986, is a direct response to these problems. We have proudly protected 50 wildlife sanctuaries totaling 650 acres and we are actively adding to this natural bounty. Our two newest additions are the 6-acre Lindsey B. Counsell Wildlife Sanctuary in Centerville and a 14-acre Sanctuary nestled in the middle of the Mashpee National Wildlife Refuge. Both parcels offer high priority habitat for a diverse array of species and provide critical groundwater protection. We negotiated fair prices on both, but the total price was steep, and we need your help to pay off a loan and replenish our land protection account, so we can continue to save more special places for the terrapins, and for all creatures that walk this earth.

Humans were/are part of the problem, but now we (you and I) are part of the solution!

The mailing packet you received today includes a reply envelope that we hope you will use to send in your donation. Or you can give online by visiting <u>www.orendalandtrust.org</u> or following this QR code link using your smart phone camera.



Whether you chose to make a single contribution to this Annual Appeal, donate appreciated stock to help offset your 2021 tax burden, or become a sustaining member of our monthly Green Giving program, we welcome your contribution. No gift is too small. Thank you for whatever you can contribute at this time.

Sincerely,

Daniel J Mirost

Daniel J. Morast, President

Jey Thebodeau

Jeff Thibodeau, Executive Director