

Diamondback Terrapin Turtle Protection Program Description & Call for Turtle Team Volunteers

HISTORY: Orenda Wildlife Land Trust, Inc., a non-profit land and wildlife conservation organization founded in 1986, with wildlife sanctuaries covering over 730 acres across Cape Cod and beyond, is supporting the reproductive success of the Barnstable Great Marsh Diamondback terrapin population (*Malaclemys terrapin*), by conducting nest monitoring and wildlife protection activities on one of our sanctuaries located in West Barnstable. In 2020, 37 active nests were identified, marked and mapped, all predated with no observed hatchling survival. In 2021, our volunteer Turtle Team protected multiple nests, from which many hatchlings were successfully released into the wild.



Join Our
Turtle
Team

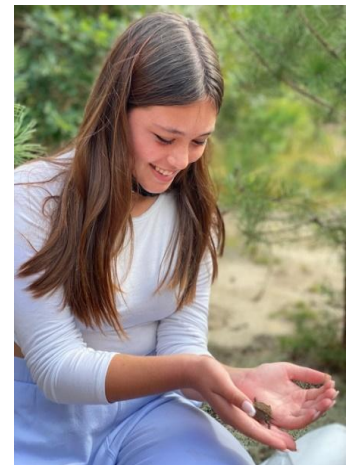
2022 PROGRAM ACTIVITIES: In 2022, we will:



1. Identify, document, protect and mark terrapin nests through careful observation of turtle activity, soils, and other site conditions from June through September.
2. Install game cameras to document nesting and predation activities.
3. Gather GPS coordinates and map nest locations.
4. Document observations including physical, reproductive and demographic data such as nesting dates, time of day, weather, clutch size, egg size and weight, clutch survival, etc.
5. Log site observations including presence and quantity of actively nesting turtles, hatchling success vs. predation, weather, tides, date/time and other factors.
6. Investigate and document successful nesting

through egg confirmation, and protect nests from depredation using wire mesh cages that exclude predators but allow hatchlings to emerge via small openings. Daily observation enhances volunteer presence, species/program success and rapid responsiveness.

7. Assist with hatchling release and dispersal to safe vegetative cover.
8. Initiate a hatchling head start program pending receipt of the proper approvals and establishment of partnerships (2023-24).
9. Install fencing on a portion of the turtle garden in cooperation with researchers from St. Lawrence University and SUNY Potsdam, to maximize nest protection and efficiency of effort. Results will be compared to current strategies.



If you would like to join our Turtle Team,
please email Lisa Nagel, Program Coordinator, at lisanagel@orendalandtrust.org

Information/donations:
www.orendalandtrust.org

Program Coordinator:

- **Lisa Nagel**, Orenda's Clerk, is the primary point of contact and coordinates all aspects of Orenda's Turtle Protection Program. Lisa earned an undergraduate degree in Nursing from Syracuse University and a law degree from Loyola University of Chicago School of Law. She has worked in various nursing and legal capacities during her career and also as a Youth Services Librarian. Lisa can be reached at lisanagel@orendalandtrust.org or by calling 847-476-3018.

Advisors:

- **Barbara Brennessel, Ph.D** is a Professor Emerita at Wheaton College from which she retired in 2013. Although originally trained as a biochemist, she has spent close to 20 years in diamondback terrapin research, conservation and education. She is the author of "Diamonds in the Marsh: A Natural History of the Diamondback Terrapin," "Good Tidings: The History and Ecology of Shellfish Aquaculture in the Northeast," "The Alewives' Tale: The Life History and Ecology of River Herring in the Northeast," and a children's book, "The Adventures of Allie the Alewife." She is coauthor of "Tidal Water," a book about the history of Wellfleet's Herring River.
- **Ian Ives** is the Director of Mass Audubon's Long Pasture Wildlife Sanctuary, and holds a MS in Conservation Biology (thesis involving Asian turtle conservation). Ian has conducted numerous ecological management, restoration and conservation biology projects in his 28-year career in the environmental field including three years of field research on Blanding's turtles in Concord MA and two years of research on Asian turtles in collaboration with the Turtle Survival Alliance. Ian currently oversees conservation and ecological management at the 12 sanctuaries he oversees on Cape Cod. Ian is currently the principal investigator for Mass Audubon's Spadefoot Toad Conservation and Restoration project, in partnership with Mass NHESP, Zoo New England and other collaborators. Ian has contributed several peer reviewed articles for publication, presented at numerous conferences in the scientific community and lectures regularly with Mass Audubon.

Orenda Wildlife Land Trust Inc. is also thankful for the training and advice offered by Mass Audubon Wellfleet Bay Wildlife Sanctuary that helped guide this project.

