

FLORIDA TURTLE

Florida Turtle Conservation Trust

Working to Conserve Florida's Rich Turtle Diversity

Update 2022

CONSERVATION TRUST

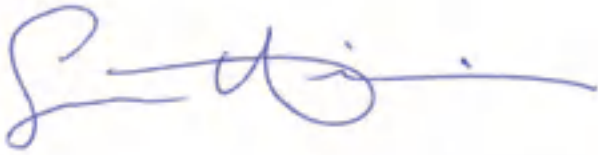


Hello friends and patrons of the Florida Turtle Conservation Trust (FTCT). Our small, conservation NGO continues working to conserve Florida's rich turtle diversity through research, education, and advocacy. We are pleased to provide you with this summary of our 2022 activities to date.

Thank you for your continued support of the FTCT. Our projects and programs are entirely funded by grants and private contributions, and we are most grateful to our generous donors who make this important conservation work possible. Your financial contributions have enabled us to complete a long list of field projects and conservation education programs since our formation in 1999. As a reminder, the FTCT is a tax-exempt organization under Internal Revenue Code 501(c)(3), so all donations and gifts are tax deductible as allowable by law.

If you wish to name the FTCT in your will or estate plan, we should be named as: Florida Turtle Conservation Trust, a nonprofit corporation, organized and existing under the laws of the State of Florida, with principal business address of 1213 Alhambra Way S., St. Petersburg, FL 33705-4620. Tax identification number: 65-0914313. Date of incorporation: 11 February 1999.

Respectfully,



George L. Heinrich, Executive Director

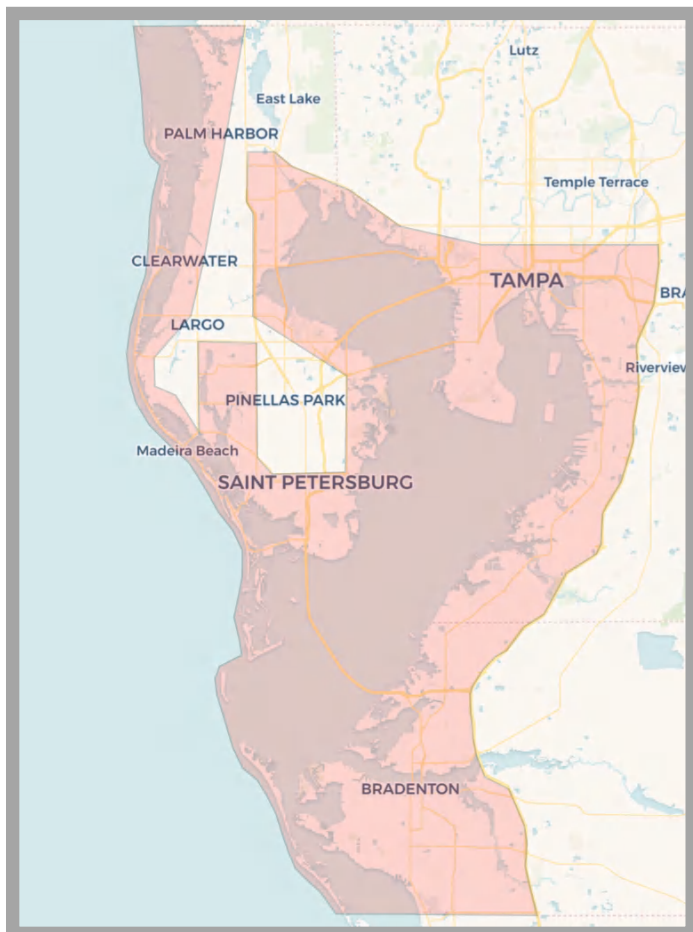


Timothy J. Walsh, Assistant Director

Diamondback terrapin field study underway

We have completed the first field season of our three-year study on the distribution and status of the ornate diamondback terrapin (*Malaclemys terrapin macrospilota*) in the Tampa Bay region. Funded by a grant awarded to our partner, Dr. J. Sean Doody (University of South Florida), from the Tampa Bay Estuary Program's Tampa Bay Environmental Restoration Fund, this project will allow us to determine distribution, identify nesting areas, and assess threats. Fieldwork to date has documented the loss of nesting habitat due to coastal armoring, and ongoing crab pot mortality as major threats. The information collected will be incorporated into management recommendations to inform terrapin conservation efforts. Additional funding is needed to cover FTCT-related expenses.

George L. Heinrich (Heinrich Ecological Services and FTCT) and Dr. Joseph A. Butler (University of North Florida) have worked together on diamondback terrapin projects since 1995, with much of that work focused on distributional surveys. An earlier study of similar design was conducted in the Big Bend region and resulted in the following publication: [Butler, J.A. and G.L. Heinrich. 2013. Distribution of the ornate diamondback terrapin \(*Malaclemys terrapin macrospilota*\) in the Big Bend region of Florida. *Southeastern Naturalist* 12\(3\):552-567.](#)



Progress with ongoing turtle nest site choice studies

Climate change is considered to be the foremost threat to wildlife, including turtles. Along with our partners, we have made considerable progress with three studies investigating alteration of nest site choice behavior as a way for turtles to offset the impacts of rising temperatures on developing embryos. With all fieldwork complete, we are now busy presenting our findings and writing manuscripts. The first publication resulting from this work was based on a Florida softshell turtle (*Apalone ferox*) nesting study at Boyd Hill Nature Preserve (St. Petersburg, Florida) [Sullivan, S., G.L. Heinrich, N.M. Mattheus, D. Cassill, and J.S. Doody. 2022. [Can reptiles use nest site choice behavior to counter global warming effects on developing embryos? Potential climate responses in a turtle. *Frontiers in Ecology and Evolution* 10:825110.](#)]. Further, Dr. Sean Doody recently presented on gopher tortoise nest site choice at the 20th Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles (joint meeting of the Turtle Survival Alliance and the IUCN Tortoise and Freshwater Turtle Specialist Group). We expect to complete manuscripts on the gopher tortoise and peninsula cooter studies during 2023.



New protections for diamondback terrapins

Conservation victory! In January 2020, the Center for Biological Diversity (CBD; lead petitioner), along with the Florida Turtle Conservation Trust and Diamondback Terrapin Working Group filed a legal petition requesting bycatch reduction devices (BRDs) be required for use on all recreational and commercial crab pots (traps) used in Florida waters. This is the single greatest action the Florida Fish and Wildlife Conservation Commission can take to protect terrapins in our state. We commend the Commission for requiring BRDs on recreational traps, but were disappointed in their decision to not implement the same in the commercial fishery. We know for a fact that crab pot mortality is still a major threat, and are hopeful protections in the commercial fishery will follow. As a bonus, the new rule also includes language banning the take and possession of terrapins. Thank you to Elise Bennett (Florida Director, CBD) and staff for making this happen. The

conservation community is most grateful for their conservation work on behalf of turtles and for the tremendous support received from turtle biologists and the general public. Working with our partners, we will continue to advocate for better turtle protection.

Increased rate of gopher tortoise habitat loss due to rampant development

Like most of the conservation community, the FTCT was shocked by the Florida Fish and Wildlife Conservation Commission's Executive Order (EO) 21-27 (dated 18 November 2021) which relaxed gopher tortoise relocation requirements and diminished the conservation outlook for this imperiled upland species. Specific concerns regarded deviations from the existing Gopher Tortoise Permitting Guidelines, including waiving of the provision that "a gopher tortoise recipient site must be no more than 100 miles north or south of the donor site." This change meant that there would be no limit as to how far tortoises could be moved, and the EO disregarded concerns with these reptiles adapting to new climates (e.g., relocation of tortoises from warmer climates to colder regions may cause health issues). Other deviations of concern allowed tortoises to be temporarily stored and later relocated to another site when available, as well as eliminated the maximum 72 hour holding time. This EO made it easier for developers to continue destroying habitat and weakened FWC's Gopher Tortoise Permitting Guidelines which were designed to protect populations long-term. The rate of habitat development in Florida has surpassed the rate at which tortoises can be relocated. We urge the agency to be more proactive with efforts to conserve tortoises and their habitat. Continuation of the status quo will result in more gopher tortoise populations occurring in small fragments of habitat and with no long-term future of persisting. When you move tortoises, you're just relocating one component of a diverse and rich ecosystem. Over 365 other species have been documented from gopher tortoise burrows. Although tortoises are relocated, other species are entombed in the burrow. Less upland habitat = less gopher tortoises = less biodiversity.



The Big Turtle Year (book project underway)

The Big Turtle Year was a successful FTCT conservation education initiative conducted during 2017. Please visit www.thebigturtleyear.org to learn about the project's goal of raising awareness regarding the rich diversity, ecology, and conservation needs of turtle species occurring in the United States, the most turtle rich country in the world. We are now working on a manuscript that we hope to have published in a couple years.

Donor recognition

Thank you to the following donors for supporting the FTCT and turtle conservation since our previous update: Jim Araiza, Benevity Community Impact Fund, Elise Bennett, Andrew Billing, Martha Clutter, Marla Despas, Virginia Edmonds, Whit and Carolyn Gibbons, Jef Henniger, Kristin Hoffschmidt, Krause Family Charitable Foundation, Ryan Parker, PayPal Giving Fund, Frederick Plate, Roberta Hope Waller, and Christine Wright.



Cover photo: adult female ornate diamondback terrapin (*Malaclemys terrapin macrospilota*) in southwestern Florida (photograph by George L. Heinrich).

Page three photos: top: Dr. Joseph A. Butler (University of North Florida) preparing to search for evidence of diamondback terrapin presence (photograph by George L. Heinrich); bottom left: Tampa Bay diamondback terrapin study area (Pinellas, Hillsborough, and Manatee counties); bottom right: Dr. Sean Doody (University of South Florida) walking boat toward shore of an island (photograph by George L. Heinrich).

Page four photo: Florida softshell turtle (*Apalone ferox*) nesting on a gopher tortoise (*Gopherus polyphemus*) burrow apron at Boyd Hill Nature Preserve (St. Petersburg, Florida; photograph by George L. Heinrich).

Page five photo: adult female gopher tortoise marked #104 in 1998 at Boyd Hill Nature Preserve (St. Petersburg, Florida); still healthy, active, and reproducing in 2022 (photograph by George L. Heinrich).

Page six photo: adult male Florida box turtle (*Terrapene carolina bauri*) in Seminole County, Florida (photograph by Timothy J. Walsh).