White Paper: Gopher Tortoise Preservation Councilman Rich Blonna

June 7, 2021

Introduction

On April 5th the City Council issued a proclamation declaring April 10th Gopher Tortoise Day. This day, celebrated across the state since 2016, honors these special creatures and the people who work to protect them. Lori Beall, Program Director of the Audubon of the Western Everglades (AWE) accepted the proclamation from City Council Chairperson Jared Grifoni and thanked the Council and the City's Beach and Coastal Resources Advisory Committee (BACR) for their support.

The reading of the proclamation at the City Council Meeting concluded Gopher Tortoise Day celebrations for the public that included a variety of tables including a human sized burrow, tortoise bingo, crafts, live tortoises of different species, and native plants. These events were a great way to bring attention to the plight of gopher tortoises on Marco Island and the City's efforts to help protect them and their habitat.

The Importance of Gopher Tortoises

Gopher Tortoises are considered a keystone species. A keystone species is a species on which other species in an ecosystem largely depend, such that if it were removed, the ecosystem would change drastically. Being a keystone species, Gopher Tortoise burrows provide homes for over 350 other species of animals. In other words, Marco Island's Gopher Tortoise burrows not only provide homes for the tortoises, but they also provide shelter for 350 other creatures including Burrowing Owls. Gopher Tortoises are a designated, state threatened species. Both tortoises and their burrows are protected under Florida law.

Marco Island is one of only a few places in Florida where Gopher Tortoises thrive. Gopher Tortoises prefer open canopy and forested lands that have sandy and well-drained soils (such as the Indian Hills section of Marco Island). There are several lots with gopher tortoise habitat and active burrows in this section of the island and surrounding the Otter Mound Preserve.

Besides being a keystone species that is unique to our island, viewing Gopher Tortoises has become a major attraction for residents and visitors. As you drive, bike, or walk around our island, it is common to see people pulled over near Gopher Tortoise areas watching or photographing these fascinating creatures as they forage for food or bask in the sun near the mouths of their burrows.

Unfortunately, one of the greatest threats to Gopher Tortoises is development of their preferred upland habitats. Currently, when Gopher Tortoises are relocated from lots slated for development on Marco Island, they wind up in a preserve in Central Florida where most of them perish.

Surveying Our Gopher Tortoise Population

For the past year, with funding from the City of Marco Island through the BACR, AWE Program Director Lori Beall, Field Biologist Brittany Piersma, and a team of volunteers from Marco

Island and Florida Gulf Coast University (FGCU) have been conducting a *Counting and Data Collection Survey* of Gopher Tortoises on Marco Island. The team initially sent out more than 300 *permission to enter* letters to owners of lots that potentially had tortoises on them. They eventually winnowed the list to 126 properties that they were able to survey. Every week Brittany and her team went out into the field and identified and counted Gopher Tortoise burrows on these approved lots across the island (Beall, 2021).

As of 5/24/21, AWE had surveyed 126 properties and counted 1,345 potentially occupied burrows. It was estimated that these 1345 burrows would house around 673 Gopher Tortoises. AWE reports that Brittany is around 50% finished with the surveying. Upon completion, AWE will begin to put together a comprehensive land study about the actual population of Gopher Tortoises on the Island (Beall, 2021). In addition to getting a better estimate of the Gopher Tortoise population and area, the comprehensive land study will help us understand the pathways the creatures use when moving about the island. This is important is helping protect them as Marco Island continues to develop.

The Challenge

The challenge in protecting Gopher Tortoises and their habitat is convincing residents and public agencies with conservation land acquisition funding, that preserving expensive, small urban lots on Marco Island is a good investment for conservation dollars. Organizations such as Conservation Collier prefer to use their funds to acquire large tracts of land in less-developed areas where the per/acre costs drop dramatically.

Nevertheless, there is value-added to promoting additions to existing Conservation Collier Preserves like Otter Mound on the southern tip of Marco Island. This area has native habitat and soils perfectly suited to protect the Gopher Tortoises that have lived there for many hundreds of years.

Using that rationale, Audubon Western Everglades, Florida Wildlife Federation (FWF), and the City of Marco Island submitted recommendations (we sent letters in February) to prioritize for preservation, parcels near the Otter Mound Preserve. AWE and FWF submitted a recommendation to prioritize these parcels near Otter Mound Preserve as a new *Target Protection Area* (TPA).

It was hoped that by prioritizing these lots as a new TPA, Conservation Collier would have included them in their Land Acquisition Cycle #10 which runs from February 2021 through July 31, 2021. An acquisition cycle is a period of time during which Conservation Collier solicits new parcels of land that they want to preserve. There is an estimated \$13M to spend throughout Collier County during Cycle #10.

Unfortunately, on April 12th, the Conservation Collier Land Acquisition Advisory Committee (CCLAAC) chose not to put the Marco lots on their list of priority acquisitions due to their small relative size and high cost.

At that time however, the CCLAAC made it clear that exclusion from TPA status did not preclude any of these lots from being considered for ultimate purchase by Conservation Collier if the property owners personally applied to sell their lots. Nominations and applications for parcel sales opened up in February for Cycle 10 and will continue through July 31, 2021.

How the City Council Can Help

Immediate Action Steps

1. Support Continued Funding of the Gopher Tortoise Survey

Ensuring that the BACR has the necessary funding to support and finish this study is essential. Since August 2020 the Beach and Coastal Resources Advisory Committee has given Audubon of the Western Everglades \$6,500.00 to work on the study contingent upon quarterly reporting of their findings to the City. They have recently begun complying with this requirement (see attached). In fiscal year 2021, \$10,000.00 was earmarked for the BACR. to continue this study and fund other projects. The City Council should support continued funding of this project until it is finished.

2. Support the City's Gopher Tortoise Signage Program

The Department of Public Works identifies critical Gopher Tortoise habitat and tortoise crossings with signs. These crossing signs are placed on public property and notify drivers to be aware of tortoises in the road. After receiving permission from property owners, the critical habitat signs are placed on lots where tortoises and their burrows exist. The City Council should support continued funding and implementation of this signage project.

3. Conduct Additional Outreach to The Owners of Three Lots Identified in February

There is still a chance that the properties identified by AWE, WWE, and the City of Marco Island as being critical Gopher Tortoise habitat can be purchased by Conservation Collier. Additional outreach (phone calls, additional letters etc.) to the owners of the lots by The City Council might convince them to become "willing sellers" and thus personally apply to CCLAAC to be re-considered for acquisition.

For Future Discussion

1. Support Residents Who Have Purchased Lots for Conservation Purposes

This can be done by developing public-private partnerships to maintain habitat and protect Gopher Tortoises. AWE and the Beach and Coastal Advisory Committee have identified Marco Island residents who have purchased lots that are adjacent to their properties that contain active gopher tortoise burrows. They purchased these properties for the express purpose of preserving them from development. These residents could use help in maintaining the lots so they do not get overrun with invasive species such as Brazilian Red pepper plants.

To accomplish this action, the Departments of Public Works and Parks and Recreation could develop a plan for working with these residents to help them maintain these properties and protect the tortoises. The City Council could approve a budget for clean-up and maintenance of these lots on a periodic basis.

2. Lobby our County Council and Provide Testimony

During the final evaluation of parcels in late 2021, the City of Marco Island and AWE representatives could lobby our County Board of Commissioners and give public testimony in support of purchasing parcels on Marco Island. We could do this both at the CCLAAC and Board of Commissioners Meetings.

3. Create a Safe Harbor-Like Management Program for Gopher Tortoises

This program would be similar to the Safe Harbor Management Program for Burrowing Owls created by Chairman Grifoni in 2019. It would reward homeowners for having active gopher tortoise burrows on their properties.

4. Create a Mechanism to Receive Donated Preservation Land

According to the BACR, AWE, and others, there are more residents who would be interested in donating parcels of land that contain gopher tortoise habitat to the City of Marco Island. They are looking for a mechanism to donate their property and assurances that it would be maintained properly. We could explore creating such a mechanism with the City of Marco Island Department of Parks and Recreation and/or the Marco Island Community Parks Foundation Inc.

Reference: Beall, L (2021). AWE Conservation Program Report through Mid May 2021.