

Listed Species Survey

Section 17 Township 52 Range 26
MARCO BCH UNIT 10 BLK 348 LOT 15
Parcel Id. 57872200007

989 Winterberry Dr.
Marco Island, FL 34145
Collier County

Survey conducted: September 10, 2024

Prepared for:
Ms. Sarah Lyons

Field survey and report completed by:

Tropical Environmental Consultants



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I. INTRODUCTION

Tropical Environmental Consultants (TEC) conducted a listed species survey on the subject 0.385-acre property located at 989 Winterberry Dr., Marco Island, FL 34145 (Figure 1). The parcel is zoned within use code 10 – vacant commercial and was undeveloped/landscaped and maintained at the time of inspection. The lot is located within Florida Cooperative Land Cover code 1600 – Coastal Uplands; (Figure 2). Additional photographs of the site are included in Section I. The site is located within the Consultation and focal area for various species with the habitat on the lot particularly suitable for Burrowing Owl (*Athene cunicularia*) and Gopher tortoise (*Gopherus polyphemus*). An outline of the basic biology of both animals is described below. The present survey was conducted to determine whether federal/state listed species, or evidence thereof, are present within the subject property as requested by the client. A resource list of potential protected species was generated using the Florida Natural Areas Inventory Biodiversity Matrix (FNAI) tool (Exhibit A). The project site is located within Matrix Unit 40521 of the Florida Natural Areas Inventory Biodiversity Matrix. The present survey was completed to examine potential or actual occupancy of all species listed within the FNAI matrix unit surrounding the parcel (40521) with the habitat specific to the survey site primarily suited for Burrowing Owl (*Athene cunicularia*) and Gopher tortoise (*Gopherus polyphemus*). Basic aspects of the animal biology provided below.

Gopher tortoise (*Gopherus Polyphemus*)



A medium-sized turtle (to 10 in. = 254 mm) fully adapted for life on land. Upper shell brown and relatively flat above; lower shell yellowish, without hinge, and projecting forward, especially in male; skin brown to dark gray. Forelimbs greatly expanded for digging; hind limbs reduced, stumpy, lacking any form of webbing between toes. Lower shell of male somewhat concave. Young: scales of carapace often with yellow centers, skin yellowish to tan; approximately 2 in. (51 mm) shell length at hatching (FNAI 2018).

Burrowing Owl (*Athene cunicularia*)



Small, ground-dwelling owl with long legs, white chin stripe, round head, and stubby tail. Adults are boldly spotted and barred with brown and white. Juveniles plainer above with less spotting, and buffy below with little or no brown barring. Will often dig their own burrow and, prior to egg laying, will line burrow and entrance with various materials (e.g., grass clumps, palm fronds). After eggs are laid, entrance chamber is further adorned with more decorative and visible objects, such as paper scraps, plastics, tin foil, mirrors, graduation tassels, cigarette butts, and other non-natural materials (FNAI 2001).

Image Source: <https://commons.wikimedia.org>



Fig. 1. Map of Marco Island, FL 34145 with subject survey area Collier County Parcel Id. 57872200007 identified in yellow.



Fig. 2. Existing site condition images at Collier County Parcel Id. 57872200007; Florida Cooperative Land Cover code 1600 – Coastal Uplands.

II. Methods

TEC staff conducted meandering pedestrian transects through the property, ensuring 100 percent visual coverage of the site, including all habitat from arboreal to ground. Transects were spaced approximately 10' apart for the initial inspection of the lot with a subsequent ground inspection focused on protected species activity and burrows and included areas surrounding the subject parcel. Potential occurrences of listed species were recorded using field GPS coordinates which were then corrected by tape measure and labeled with orange flagging tape. Photos were taken of all identified tortoise burrows and assessed as “Abandoned” or “Potentially Occupied” as per FWC guidelines. Photographs of the burrows are provided in Figure 4.

III. Results

Among potentially listed flora and fauna species, there was no listed species activity or nests/burrows recorded within the assessment area (which includes the entirety of the parcel and a 25-foot surrounding buffer). However, it is worth noting that there is a marked burrowing owl nest site on the adjacent parcel to the East located approximately 50 feet from property limits. The Florida burrowing owl (*Athene cunicularia*) is classified as State Threatened by the Florida Fish and Wildlife Conservation Commission (FWC). Taking, possessing, or selling burrowing owls, their nests (i.e., burrows), or eggs is prohibited without a permit (68A-27 F.A.C.). FWC protection buffer requirements are at least a 10-foot protection buffer during non-breeding season and a 33-foot protection buffer during nesting season (February 15 to July 10). The adjacent parcel burrow cluster appeared abandoned as both burrows were inundated with water and no species observations were recorded. Additionally, based on our review of available databases, there is no record of any other State or Federally listed species occurrences within the project site or nearby. An updated species survey should be conducted after 90 days or prior to construction to ensure species and nest adjacent parcel nest activity has not changed.

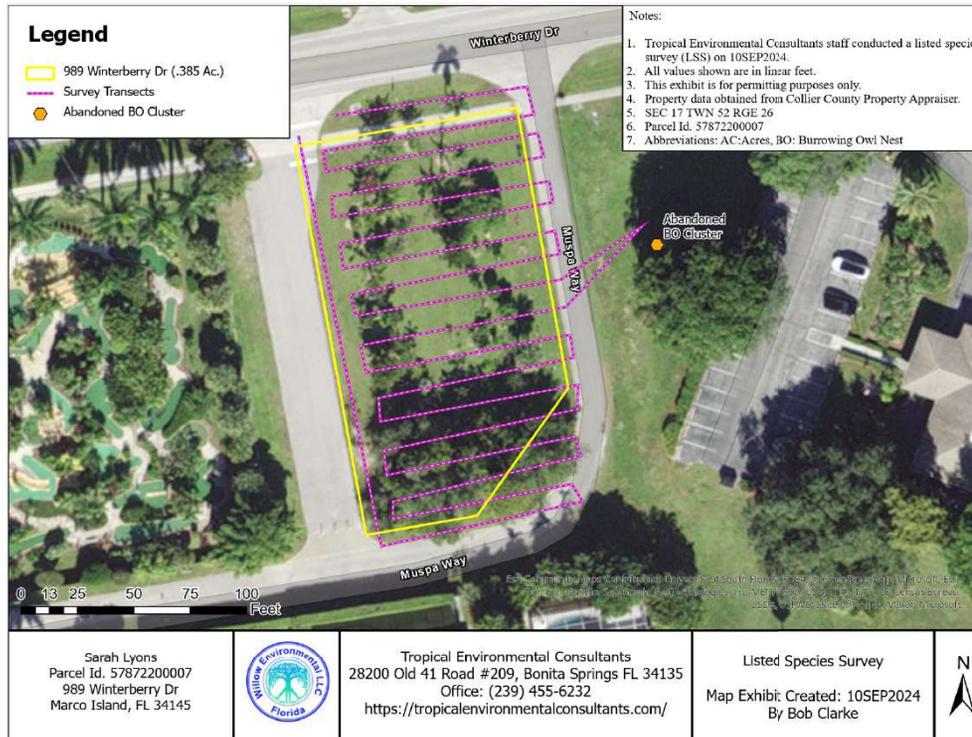


Fig. 3. Listed Species Survey Map with survey transects displaying no findings recorded at Collier County Parcel Id. 57872200007, Marco Island, Florida during September 10, 2024, listed species survey. Note that survey area extends beyond parcel limits by 25 feet or to fence line or road, where applicable.



Fig 4. Images of inactive burrowing owl nest cluster recorded on parcel adjacent to Collier County Parcel Id. 57872200007 during September 10, 2024, listed species survey.

IV. References

Florida Natural Areas Inventory 2001. Field Guide to the Gopher tortoise. Accessed January 5, 2021: https://www.fnai.org/FieldGuide/pdf/Gopherus_polyphemus.pdf

Florida Natural Areas Inventory 2018. Field Guide to the Florida Burrowing Owl. Accessed January 5, 2021: https://www.fnai.org/FieldGuide/pdf/Athene_cunicularia_floridana.pdf

EXHIBIT A (FNAI LIST)



Florida Natural Areas Inventory

Biodiversity Matrix Query Results

UNOFFICIAL REPORT

Created 9/10/2024

(Contact the FNAI Data Services Coordinator at 850.224.8207 or kbrinegar@fnai.fsu.edu for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 1 Matrix Unit: 40521

	<p>Descriptions</p> <p>DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.</p> <p>DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.</p> <p>LIKELY - The species or community is <i>known</i> to occur in this vicinity, and is considered likely within this Matrix Unit because:</p> <div style="border: 1px solid black; padding: 5px;"> <ol style="list-style-type: none"> 1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; or 2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit. </div> <p>POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.</p>
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Matrix Unit ID: 40521

1 Documented Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Athene cucularia floridana Florida Burrowing Owl	G4T3	S3	N	ST

0 Documented-Historic Elements Found

2 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Stizocera floridana</i> Florida Privet Long-Horned Beetle	G1	S1	N	N
<i>Thalasseus sandvicensis</i> Sandwich Tern	G5	S2	N	N

Matrix Unit ID: 40521

20 Potential Elements for Matrix Unit 40521

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Acipenser oxyrinchus desotoi</i> Gulf Sturgeon	G3T2T3	S2?	T	FT
<i>Chamaesyce cumulicola</i> sand-dune spurge	G2	S2	N	E
<i>Charadrius melodus</i> Piping Plover	G3	S2	T	FT
<i>Crocodylus acutus</i> American Crocodile	G2	S2	T	FT
<i>Drymarchon couperi</i> Eastern Indigo Snake	G3	S2?	T	FT
<i>Eumops floridanus</i> Florida bonneted bat	G1	S1	E	FE
<i>Gopherus polyphemus</i> Gopher Tortoise	G3	S3	C	ST
<i>Gymnogeom chapmanianus</i> Chapman's skeletongrass	G3	S3	N	N
<i>Lechea cernua</i> nodding pinweed	G3	S3	N	T
<i>Linum carteri</i> var. <i>smallii</i> Small's flax	G2T2	S2	N	E
<i>Mustela frenata peninsulæ</i> Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Nemastylis floridana</i> celestial lily	G2	S2	N	E
<i>Patachoenas leucoccephala</i> White-crowned Pigeon	G3	S3	N	ST
<i>Rostrhamus sociabilis</i> Snail Kite	G4G5	S2	E	FE
<i>Sceloporus woodi</i> Florida Scrub Lizard	G2G3	S2S3	N	N
<i>Setophaga discolor paludicola</i> Florida Prairie Warbler	G5T3	S3	N	N
<i>Sterna dougallii</i> Roseate Tern	G4	S1	T	FT
<i>Tillandsia flexuosa</i> banded wild-pine	G5	S3	N	T
<i>Trichechus manatus latirostris</i> Florida Manatee	G2G3T2	S2S3	T	N
<i>Ursus americanus floridanus</i> Florida Black Bear	G5T4	S4	N	N

Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

These results are considered unofficial. FNAI offers a [Standard Data Request](#) option for those needing certifiable data.