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# Memorandum

DRMP Job #: 18-0145.000 Date: March 31, 2020

To: Annemarie Hammond  
FDOT Florida's Turnpike Enterprise  
Permit Coordinator

From: George McLatchey  
DRMP  
Ecological Division Manager

Subject: Species-specific Survey for Florida Scrub-Jay (*Aphelocoma coerulescens*);  
Spring 2020  
Suncoast Parkway 2 (SR 44 to CR 486) FPID # 442764-1

## Project Introduction

The proposed project is a four-lane, limited-access toll facility located in Citrus County that would extend the existing Suncoast Parkway northward from its intersection with State Road (SR 44) to County Road (CR) 486 (project area). A Location Map is attached as Figure 1. The expected project length is approximately 2.4 miles.

Past scrub-jay survey efforts conducted in this region include the 1992–1993 U.S. Fish and Wildlife Service (USFWS) statewide study (Fitzpatrick et al. 1994) and the survey of the proposed Suncoast Parkway 2 corridor (US 98 to US 19) during the development of the 1998 State Environmental Impact Report (SEIR; FDOT 1998). The USFWS study identified seven scrub-jay groups in the vicinity of the proposed Suncoast Parkway 2 corridor (US 98 to US 19), two of which were near the current project area. The SEIR reported four scrub-jay groups, one of which was near the proposed project terminus. Scrub-jay surveys of the project corridor were also conducted in 2007–2009 and 2014 as part of the Suncoast Parkway 2 impact study funded by the Florida Department of Transportation (FDOT) Florida's Turnpike Enterprise. Surveys were conducted for the Suncoast Parkway segment south of the proposed project area in 2015. No scrub-jays were observed during the 2007–2009, 2014 and 2015 surveys. The project area does not occur within one of the seven Focal Landscapes identified in the 2019 Draft Florida Scrub Jay Recovery Plan Amendment (USFWS 2019).

In 2019, DRMP was contracted by Florida's Turnpike Enterprise to conduct a species-specific survey for the Florida scrub-jay within the vicinity of the proposed project area to determine if any habitat currently supports scrub-jays and to meet the Florida scrub-jay commitment set forth in the 1998 SEIR.

## Survey Methodology

The study area was defined as all Type I Florida scrub jay habitat within the project area and all-natural habitat within ¼ mile of the Type I habitat. Areas of potential Type I habitat were defined based on land use data (Southwest Florida Water Management District 2017), aerial photography and field reviews. The study area comprises three land use classes with potential scrub-jay habitat: cropland and pastureland (77 acres), longleaf pine-xeric oak (88 acres) and rural residential (85 acres). A total of 30 call stations,

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spaced approximately 200 meters, were proposed within the 250-acre study area. The study area boundary and proposed call station locations were approved by USFWS staff in an email dated January 24, 2020. An additional call station (Station 30) was added based on potential project area changes at the Knoll Rd. intersection. A map of call station locations is attached (Figure 2).

Surveys were conducted March 9–13, 2020 in accordance with USFWS accepted methodology (USFWS 2007). Surveys were conducted on calm, clear days from 8:00 AM to 1:00 PM. Temperatures throughout the surveys did not exceed 75 degrees Fahrenheit or drop below 52 degrees Fahrenheit.

Each call station was visited five times over five separate days. At each call station, recordings of scrub-jay territorial scolding, including the female "hiccup" call, were broadcast using an mp3 player and hand-held speaker. Scrub-jay calls were downloaded from "Bird Songs of Florida," a digital compilation of bird calls, acquired from the Library of Natural Sounds; Cornell Laboratory of Ornithology (<https://www3.macaulaylibrary.org/guide/bird-songs-of-florida-sampler>). Scrub-jay calls were played for a minimum of one minute in each of the four cardinal directions, while watching for a territorial response from any scrub-jays in the area. Data recorded for each station included date, time, temperature, wind speed and direction, precipitation, scrub-jay response and other wildlife observations. During the first survey date, call stations were located with a sub-meter accuracy handheld Trimble Global Positioning System (GPS) receiver and flagged. Biologists also completed habitat assessment worksheets and took photos at each call station (attached). GPS receivers were then used to navigate to each call station on subsequent visits.

**Results**

Over the course of the spring 2020 survey effort, no scrub-jays were observed at any of the call stations or while walking between stations. Detailed data from each call station are attached as Table 1.

Although Type I and Type II scrub-jay habitat classes were observed within the study area, decades of fire suppression have increased overstory tree cover in forested areas and have reduced the potential habitat for scrub-jays (USFWS 2019). In addition, the remaining scrub oak trees are often too tall or dense to support scrub-jays (Fitzpatrick 1991).

**Conclusions**

Although scrub-jay groups were documented near the project area during the 1992–1993 and 1998 surveys, the results of the 2020 scrub-jay survey indicate that scrub-jays are no longer present within the vicinity of the proposed project area. These results support similar findings from more recent scrub-jay surveys conducted in 2007–2009, 2014 and 2015.

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End of Memorandum

Attachments: Figure 1. Location Map  
Figure 2. Call Stations Map  
Habitat Assessment Worksheets  
Call Station Photos  
Table 1. Spring 2020 Scrub-jay Survey Results

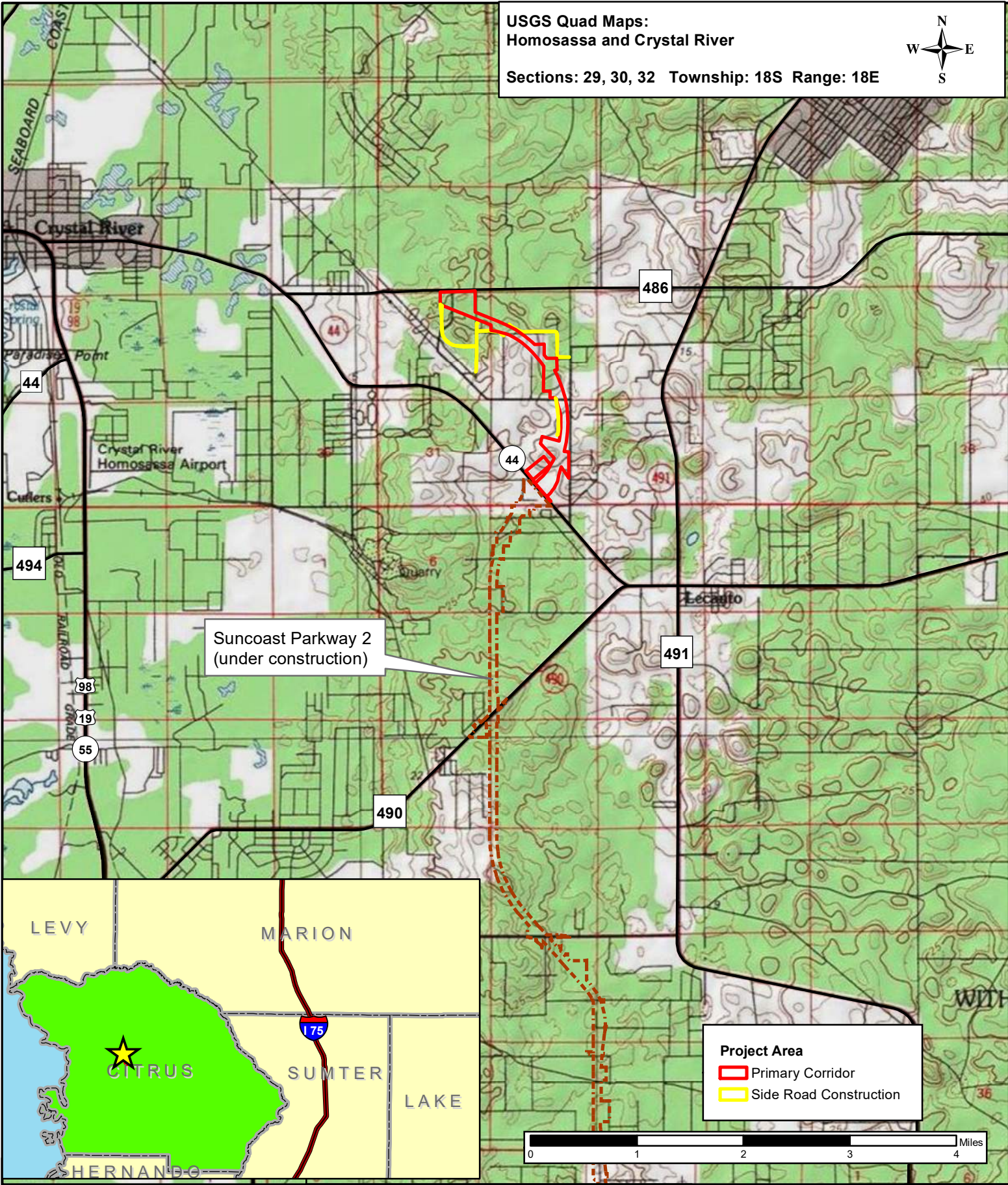
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**Suncoast Parkway 2 - SR 44 to CR 486**

FDOT Florida's Turnpike Enterprise  
FPID No. 442764-1  
Citrus County, Florida

**Location Map**

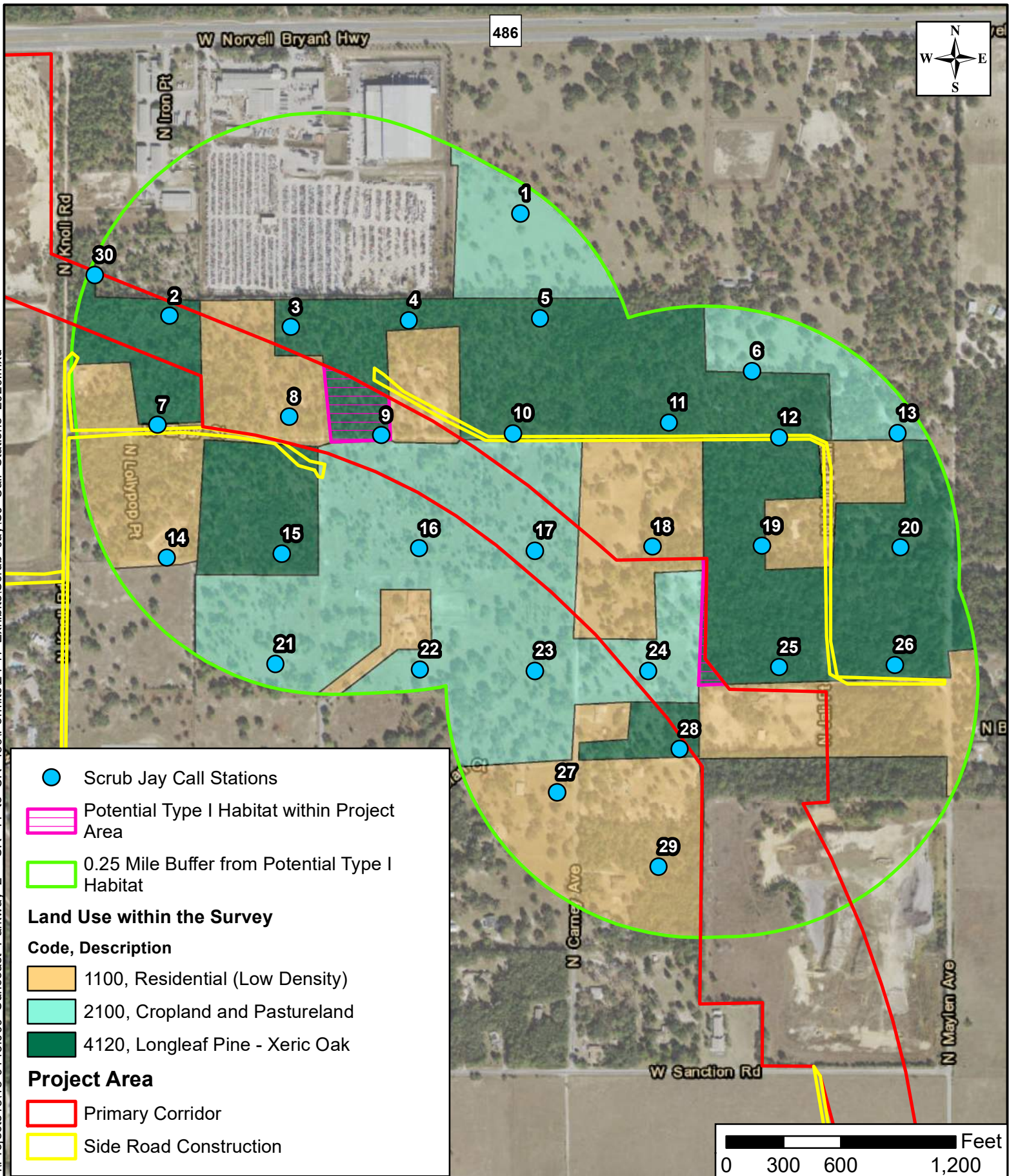
DATA SOURCE:  
Topographic Map - ESRI 2016

**Figure**

**1**



P:\Projects\18\18-0145.000 Suncoast Parkway 2 - SR 44 to CR 486\Permits\24-17-Exhibits\Scrub Jay\SR 486 Call Stations 2020.mxd



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**Suncoast Parkway 2 - SR 44 to CR 486**

FDOT Florida's Turnpike Enterprise  
FPID No. 442764-1  
Citrus County, Florida

**Scrub Jay  
Call Stations  
Spring 2020**

DATA SOURCE:  
Aerial - ESRI 2019  
Land use - SWFWMD 2017

Figure  
**2**

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

---

Call Station No.: 1

Scientist: Rachel Peters

Location: pasture

FLUCFCS Code: 2100

Habitat Description: pastureland, many dead trees (w/ cavities)

Canopy (include % Scrub Oak): ~~100%~~ 0%

Longleaf pine, Live oak, turkey oak

Shrub (% Scrub Oak): 0%

Herbaceous: bahia, various grasses

Notes: Active pasture adjacent to undergoing construction

Scrub Jay Habitat Type (Type I, II, or III): III

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

---

Call Station No.: 2

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4120

Habitat Description: Pine canopy w/ open areas and scattered juvenile oaks

Canopy (include % Scrub Oak): 0%.  
sand pine

Shrub (% Scrub Oak): 40%.  
sand live oak, juvenile oaks, shiny blueberry, turkey oaks

Herbaceous: wiregrass, gopher apple, dog fennel, rosemary, lichen

Notes: GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): 1



Habitat Assessment Data Sheet  
Suncoast Parkway 2 FPID No. 405270-1-32-01

Call Station No.: 3

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4120

Habitat Description: Pine canopy w/ open ground and  
Scattered juvenile oaks/pines

Canopy (include % Scrub Oak): 0%  
Longleaf pine, sand pine, turkey oak,  
Live oak

Shrub (% Scrub Oak): 5%  
Sand live oak, juvenile oaks (sand live,  
& turkey), saw palmettos

Herbaceous:  
wiregrass, gopher apple, prickley pear

Notes:

GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

---

Call Station No.:

4

Scientist:

Rachel Peters

Location:

FLUCFCS Code:

4120

Habitat Description:

Dense pine canopy w/ patches of saw palmetto

Canopy (include % Scrub Oak):

0%.

Longleaf pine, sand pine, turkey oak, cedar

Shrub (% Scrub Oak):

0%.

saw palmetto

Herbaceous:

wiregrass, prickley pear, ferns

Notes:

Active construction nearby, disturbed habitat with berms.

Scrub Jay Habitat Type (Type I, II, or III):

III

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 5

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4120

Habitat Description: Pine flatwoods w/ patches of saw palmetto

Canopy (include % Scrub Oak): 0%.

Longleaf pine

Shrub (% Scrub Oak): 5%.

Sand live oak, saw palmetto, turkey oak

Herbaceous: wiregrass, lichen

Notes: GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): II



**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

---

Call Station No.: 6

Scientist: Rachel Peters

Location: Pasture / forested fenceLine

FLUCFCS Code: 2100

Habitat Description: active pasture w/ scattered oaks & pines

Canopy (include % Scrub Oak): 0%

Longleaf pine, Live oak, turkey oak,

Shrub (% Scrub Oak): 5%

Sand live oak, saw palmetto

Herbaceous:

various grasses, wiregrass

Notes:

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 7

Scientist: Rachel Peters

Location: ziggy street

FLUCFCS Code: 4120/1100

Habitat Description: maintained easement w/ dense and  
overgrown scrub and scattered canopy

Canopy (include % Scrub Oak): 0%

sand pine

Shrub (% Scrub Oak): 10%

saw palmetto, sand live oak, red bays,

Herbaceous:

smilax vines

Notes:

Scrub Jay Habitat Type (Type I, II, or III):

II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 8                      Scientist: Rachel Peters

Location: vacant homesite off ziggy road

FLUCFCS Code: 4120/1100

Habitat Description: mature scattered pines and oaks

Canopy (include % Scrub Oak): 0%.

Longleaf pine

Shrub (% Scrub Oak): 5%.

Sand live oak, podocarpus hedges

Herbaceous: dog fennel, zigzag grass

Notes: GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): II



**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 9

Scientist: Chris Stalder

Location: ziggy road

FLUCFCS Code: 4120

Habitat Description: wooded area adjacent to ziggy road  
w/ vacant homesite

Canopy (include % Scrub Oak): 5%.  
Longleaf pine, turkey oak, sand live oak

Shrub (% Scrub Oak): 10%.  
sand live oaks, saw palmetto

Herbaceous: various grasses, gopher apple, runner oak

Notes:

Scrub Jay Habitat Type (Type I, II, or III):

1

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 10

Scientist: Chris Stalder

Location: ziggy road

FLUCFCS Code: 4120

Habitat Description: wooded area near ziggy road  
and vacant homesite

Canopy (include % Scrub Oak): 0%

Longleaf pine

Shrub (% Scrub Oak): 20-30%

sand live oak, turkey oak, saw palmetto

Herbaceous: dog fennel, lichen, gopher apple

Notes:

Scrub Jay Habitat Type (Type I, II, or III):

I

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 11

Scientist: Rachel Peters

Location: pine flatwoods near homesite

FLUCFCS Code: 4120

Habitat Description: Longleaf pine canopy

Canopy (include % Scrub Oak): 0%.

Longleaf pine, sand pine

Shrub (% Scrub Oak): 5%.

Saw palmetto, juvenile oaks

Herbaceous:

wiregrass

Notes:

Scrub Jay Habitat Type (Type I, II, or III): 11



**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 12

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4120

Habitat Description: Dense pine canopy

Canopy (include % Scrub Oak): 0%

Longleaf pine, live oak, turkey oak

Shrub (% Scrub Oak): 5%

sand live oak, saw palmetto

Herbaceous:

ruderal oaks, wiregrass

Notes:

6T burrows present

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 13

Scientist: Rachel Peters

Location: Pasture

FLUCFCS Code: 2100

Habitat Description: scattered oaks/pines in active pasture

Canopy (include % Scrub Oak): 10%.

sand live oak, sand pine, longleaf pine,  
magnolia

Shrub (% Scrub Oak): 0%.

juvenile pines

Herbaceous:

dog fennel, bare ground

Notes:

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

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Call Station No.: 14

Scientist: Chris Stalder

Location: unimproved pastureland

FLUCFCS Code: 2100

Habitat Description: pasture near rural homesite

Canopy (include % Scrub Oak): 0%

Live oak, sand pine

Shrub (% Scrub Oak): 5%

scattered sand live oak

Herbaceous:

blackberry, dog fennel, gopher apple

Notes:

GT burrows present

Scrub Jay Habitat Type (Type I, II, or III):

II



**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

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Call Station No.: 15

Scientist: Chris Stalder

Location: predominately oaks w/ scattered pines

FLUCFCS Code: 4/20

Habitat Description: wooded area next to open field

Canopy (include % Scrub Oak): 20%.

sand live oak, cedar, longleaf pine

Shrub (% Scrub Oak): 10%.

sand live oak, saw palmetto

Herbaceous: various grasses

Notes:

Scrub Jay Habitat Type (Type I, II, or III): 1

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 116

Scientist: Chris Stalder

Location: open field by rural homesite

FLUCFCS Code: 2100

**Habitat Description:**

Canopy (include % Scrub Oak): 0% Longleaf pine, mature live oaks

Shrub (% Scrub Oak): 0% Saw palmettos, juveniles pines

Herbaceous: dog fennel, prickly pear, green eyes

Notes: GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): III

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 17

Scientist: Chris Stalder

Location: vacant wooded home lot

FLUCFCS Code: 2100

**Habitat Description:**

Canopy (include % Scrub Oak): 0%

Longleaf pine, turkey oak, live oaks,

Shrub (% Scrub Oak): 5%

saw palmetto, juvenile sand live oaks

Herbaceous:

dog fennel, various grasses, prickly pear,  
green eyes

Notes:

Scrub Jay Habitat Type (Type I, II, or III):

II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

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Call Station No.: 18

Scientist: Rachel Peters

Location: Dense hardwood /conifer mix woodland

FLUCFCS Code: 4340

Habitat Description: in between 2 homesites

Canopy (include % Scrub Oak): 0%.

sand pine, live oak, turkey oak,  
longleaf pine

Shrub (% Scrub Oak): 5%.

sand live oak, saw palmetto, turkey oak

Herbaceous:

wiregrass, lichen, prickly pear

Notes:

Dense canopy

Scrub Jay Habitat Type (Type I, II, or III):

II



**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

---

Call Station No.: 19

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4120

Habitat Description: Dense oak canopy

Canopy (include % Scrub Oak): 0%.

mature live oaks, sand pines

Shrub (% Scrub Oak): 5%.

saw palmetto, sand live oak, juvenile oaks

Herbaceous:

blackberry, grapevine

Notes:

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

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Call Station No.: 20

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4340

Habitat Description: overgrown woodland next to powerline easement

Canopy (include % Scrub Oak): 0%  
sand pine, live oaks,

Shrub (% Scrub Oak): 5%  
sand live oak, cabbage palm, juvenile pines

Herbaceous: chain fern, blackberry, dog fennel, wiregrass

Notes:

GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 21

Scientist: Chris Stalder

Location: Vacant overgrown lot next to homesites

FLUCFCS Code: 2100

**Habitat Description:**

Canopy (include % Scrub Oak): 10%.

sand live oak, turkey oak, sand pine

Shrub (% Scrub Oak): 0%.

juvenile pines, saw palmetto

Herbaceous: various grasses, dog fennel, prickly pear

Notes: GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 22                      Scientist: Chris Stalder

Location: pasture near homesite

FLUCFCS Code: 2100

Habitat Description: Open pasture w/ scattered mature trees

Canopy (include % Scrub Oak): 0%.

Longleaf pine, ~~Scrub~~ Live oak, cedar

Shrub (% Scrub Oak): 0%.

Herbaceous:

American beautyberry, blackberry, pokeweed,  
various grasses

Notes:

Scrub Jay Habitat Type (Type I, II, or III): III



**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 23

Scientist: Chris Stalder

Location: Near Carney Ave.

FLUCFCS Code: 2100/1100

Habitat Description: cow pasture near rural homesites

Canopy (include % Scrub Oak): 0%.  
sand & longleaf pines

Shrub (% Scrub Oak): 0%.

Herbaceous:  
dog fennel, various grasses

Notes: GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): ///

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

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Call Station No.: 24

Scientist: Chris Stalder

Location: scattered pines in vacant lot

FLUCFCS Code: 2100 / 1100

Habitat Description: rural homesites & cow pasture

Canopy (include % Scrub Oak): 0%.

Longleaf pine, turkey oak, cedar, live oak

Shrub (% Scrub Oak): 0%.

Saw palmetto,

Herbaceous:

Various grasses, runner oak, dog fennel

Notes:

GT burrows present

Scrub Jay Habitat Type (Type I, II, or III):

III

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2      FPID No. 405270-1-32-01**

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Call Station No.: 25

Scientist: Chris Stalder

Location: wooded area next to new home construction

FLUCFCS Code: 4120

Habitat Description: Dense Oak/pine canopy, recently disturbed

Canopy (include % Scrub Oak): 5%.

Longleaf pine, sand live oak, turkey oaks

Shrub (% Scrub Oak): 5%.

saw palmetto, sand live oak,

Herbaceous:

various grasses, ferns, blackberry, dog fennel

Notes:

GT burrows present

Scrub Jay Habitat Type (Type I, II, or III):

II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 26

Scientist: Chrs. Stalder

Location: Near Hijack Path road

FLUCFCS Code: 4120

Habitat Description: Dense oak/pine canopy

Canopy (include % Scrub Oak): 0%  
live oak, longleaf pine, sand pine

Shrub (% Scrub Oak): 5%  
sand live oak, saw palmetto

Herbaceous:  
Lichens, wiregrass, smilx, blackberry

Notes:

near busy road

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 27

Scientist: Chris Stalder

Location: Near Carney Ave.

FLUCFCS Code: 1100

Habitat Description: rural homesites

Canopy (include % Scrub Oak): 5%

Longleaf pine, sand live oak, turkey oak

Shrub (% Scrub Oak): 0%

Herbaceous:

various grasses

Notes:

in yards of homeowners

Scrub Jay Habitat Type (Type I, II, or III): II



Habitat Assessment Data Sheet  
Suncoast Parkway 2 FPID No. 405270-1-32-01

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Call Station No.: 28

Scientist: Chris Stalder

Location: scattered hardwoods

FLUCFCS Code: 4120

Habitat Description: wooded area near homesites

Canopy (include % Scrub Oak): 10%.

sand live oaks, turkey oak, longleaf  
pines, live oaks

Shrub (% Scrub Oak): 0%.

saw palmetto, juvenile oaks

Herbaceous:

Various grasses, dog fennel, gopher apple,  
runner oak

Notes:

overgrown

Scrub Jay Habitat Type (Type I, II, or III): II

Habitat Assessment Data Sheet  
Suncoast Parkway 2    FPID No. 405270-1-32-01

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Call Station No.: 29                      Scientist: Chris Stalder

Location: wooded area near homesites

FLUCFCS Code: 4340/1100

Habitat Description:

Canopy (include % Scrub Oak): 10%.  
sand live oak, longleaf pines, live oaks

Shrub (% Scrub Oak): 0%.  
saw palmettos, juvenile oaks/pines

Herbaceous:  
wiregrass, lichen

Notes:

GT burrows present

Scrub Jay Habitat Type (Type I, II, or III): II

**Habitat Assessment Data Sheet**  
**Suncoast Parkway 2    FPID No. 405270-1-32-01**

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Call Station No.: 30

Scientist: Rachel Peters

Location:

FLUCFCS Code: 4120

Habitat Description:

Canopy (include % Scrub Oak): 5%.  
sand live oak, longleaf pines

Shrub (% Scrub Oak): 5%.  
sand live oak, sand pine, red bays, cabbage palms

Herbaceous: lichen, various grass, dog fennel, debris

Notes:

Scrub Jay Habitat Type (Type I, II, or III): II

# Call Station Photos



Call Station 1



Call Station 2



Call Station 3



Call Station 4



# Call Station Photos



Call Station 5



Call Station 6



Call Station 7



Call Station 8



# Call Station Photos



Call Station 9



Call Station 10



Call Station 11



Call Station 12

# Call Station Photos



Call Station 13



Call Station 14



Call Station 15



Call Station 16



# Call Station Photos



Call Station 17



Call Station 18



Call Station 19



Call Station 20

# Call Station Photos



Call Station 21



Call Station 22



Call Station 23



Call Station 24



# Call Station Photos



Call Station 25



Call Station 26



Call Station 27



Call Station 28



# Call Station Photos



Call Station 29



Call Station 30

Florida's Turnpike Enterprise

FPID# 442764-1

Call Station #	# of Surveys Needed	Reviewer	Date	Start Time	Adults Observed	Juveniles Observed	Direction of Flight	Temp. (F)	Wind Speed (mph) & Direction	Precipitation (PRCP) & Visibility	Notes
1	4	RP	3/9/20	8:40	0	0	n/a	52	1 S	none, clear	American kestrel perched in dead pine, 4 crows
1	3	RP	3/10/20	8:44	0	0	n/a	61	0	none, clear	2 crows
1	2	RP	3/11/20	8:22	0	0	n/a	56	0	none, clear	crows
1	1	RP	3/12/20	8:41	0	0	n/a	57	0	none, clear	
1	0	RP	3/13/20	10:38	0	0	n/a	68	1 SW	none, clear	crows
2	4	RP	3/9/20	10:22	0	0	n/a	59	0	none, clear	
2	3	RP	3/10/20	9:10	0	0	n/a	61	0	none, clear	
2	2	RP	3/11/20	8:48	0	0	n/a	56	0	none, clear	
2	1	RP	3/12/20	9:08	0	0	n/a	57	0	none, clear	
2	0	RP	3/13/20	11:05	0	0	n/a	70	0	none, clear	
3	4	RP	3/9/20	9:25	0	0	n/a	59	0	none, clear	mourning dove
3	3	RP	3/10/20	9:02	0	0	n/a	61	0	none, overcast	
3	2	RP	3/11/20	8:40	0	0	n/a	56	0	none, clear	mourning dove
3	1	RP	3/12/20	8:59	0	0	n/a	57	0	none, clear	
3	0	RP	3/13/20	10:55	0	0	n/a	68	0	none, clear	
4	4	RP	3/9/20	9:05	0	0	n/a	53	1 S	none, clear	
4	3	RP	3/10/20	8:54	0	0	n/a	61	0	none, overcast	
4	2	RP	3/11/20	8:31	0	0	n/a	55	0	none, clear	
4	1	RP	3/12/20	8:51	0	0	n/a	57	0	none, clear	
4	0	RP	3/13/20	10:47	0	0	n/a	68	0	none, clear	
5	4	RP	3/9/20	8:24	0	0	n/a	52	0	none, clear	crow, loggerhead shrike
5	3	RP	3/10/20	8:37	0	0	n/a	61	0	none, overcast	
5	2	RP	3/11/20	8:14	0	0	n/a	56	0	none, clear	crows
5	1	RP	3/12/20	8:33	0	0	n/a	57	0	none, clear	
5	0	RP	3/13/20	10:32	0	0	n/a	68	0	none, clear	cardinal
6	4	RP	3/9/20	12:00	0	0	n/a	71	3-4 E	none, clear	pine warblers
6	3	RP	3/10/20	12:05	0	0	n/a	73	4-5 ESE	none, clear	
6	2	RP	3/11/20	11:20	0	0	n/a	73	0	none, clear	
6	1	RP	3/12/20	11:40	0	0	n/a	74	0	none, clear	black vulture
6	0	RP	3/13/20	9:29	0	0	n/a	55	0	none, clear	cardinal
7	4	RP	3/9/20	9:47	0	0	n/a	60	0	none, clear	2 blue jays, dogs barking
7	3	RP	3/10/20	9:31	0	0	n/a	63	0	none, overcast	rooster, crow
7	2	RP	3/11/20	9:10	0	0	n/a	58	0	none, clear	blue jays, crows, dog barking
7	1	RP	3/12/20	9:24	0	0	n/a	57	0	none, clear	
7	0	RP	3/13/20	11:23	0	0	n/a	71	0	none, clear	
8	4	RP	3/9/20	10:34	0	0	n/a	60	0	none, clear	3 blue jays
8	3	RP	3/10/20	9:40	0	0	n/a	63	0	none, overcast	crows
8	2	RP	3/11/20	9:18	0	0	n/a	60	1 NNE	none, clear	blue jays, dog barking
8	1	RP	3/12/20	9:32	0	0	n/a	57	0	none, clear	
8	0	RP	3/13/20	11:30	0	0	n/a	71	0-3 SE	none, clear	cardinals, mourning dove
9	4	CS	3/9/20	8:15	0	0	n/a	52	0	none, clear	
9	3	CS	3/10/20	9:47	0	0	n/a	63	1 W	none, overcast	crows, rooster
9	2	CS	3/11/20	8:10	0	0	n/a	54	0	none, clear	
9	1	CS	3/12/20	9:40	0	0	n/a	60	0	none, clear	
9	0	CS	3/13/20	10:30	0	0	n/a	68	0	none, clear	
10	4	CS	3/9/20	8:32	0	0	n/a	52	0	none, clear	
10	3	CS	3/10/20	9:51	0	0	n/a	63	1 W	none, overcast	rooster, cardinal
10	2	CS	3/11/20	8:25	0	0	n/a	54	0	none, clear	
10	1	CS	3/12/20	9:48	0	0	n/a	61	0	none, clear	
10	0	CS	3/13/20	10:40	0	0	n/a	68	0	none, clear	
11	4	RP	3/9/20	11:50	0	0	n/a	71	0-3 E	none, clear	
11	3	RP	3/10/20	11:56	0	0	n/a	71	0-3 ESE	none, clear	barred owl in longleaf pine
11	2	RP	3/11/20	11:10	0	0	n/a	72	0	none, clear	pileated woodpecker
11	1	RP	3/12/20	11:33	0	0	n/a	74	3-4 NE	none, clear	
11	0	RP	3/13/20	9:22	0	0	n/a	55	0	none, clear	
12	4	RP	3/9/20	12:14	0	0	n/a	71	3-4 E	none, clear	

Florida's Turnpike Enterprise

FPID# 442764-1

Call Station #	# of Surveys Needed	Reviewer	Date	Start Time	Adults Observed	Juveniles Observed	Direction of Flight	Temp. (F)	Wind Speed (mph) & Direction	Precipitation (PRCP) & Visibility	Notes
12	3	RP	3/10/20	12:16	0	0	n/a	73	0-1 ESE	none, clear	
12	2	RP	3/11/20	11:33	0	0	n/a	74	0	none, clear	
12	1	RP	3/12/20	11:50	0	0	n/a	74	1-2 NE	none, clear	
12	0	RP	3/13/20	9:35	0	0	n/a	56	0	none, clear	
13	4	RP	3/9/20	12:29	0	0	n/a	71	4 E	none, clear	
13	3	RP	3/10/20	12:27	0	0	n/a	73	0-1 ESE	none, clear	
13	2	RP	3/11/20	11:45	0	0	n/a	75	0	none, clear	
13	1	RP	3/12/20	12:02	0	0	n/a	75	0	none, clear	
13	0	RP	3/13/20	9:58	0	0	n/a	55	0	none, clear	
14	4	CS	3/9/20	9:40	0	0	n/a	52	0	none, clear	
14	3	CS	3/10/20	10:32	0	0	n/a	63	2 W	none, overcast	
14	2	CS	3/11/20	9:25	0	0	n/a	54	0	none, clear	
14	1	CS	3/12/20	10:23	0	0	n/a	63	0	none, clear	
14	0	CS	3/13/20	11:24	0	0	n/a	68	2 SE	none, clear	
15	4	CS	3/9/20	9:55	0	0	n/a	52	0	none, clear	
15	3	CS	3/10/20	10:40	0	0	n/a	63	0	none, overcast	tufted titmouse
15	2	CS	3/11/20	9:40	0	0	n/a	54	0	none, clear	
15	1	CS	3/12/20	10:31	0	0	n/a	63	0	none, clear	
15	0	CS	3/13/20	11:36	0	0	n/a	68	0	none, clear	
16	4	CS	3/9/20	10:10	0	0	n/a	52	2 NE	none, clear	roosters
16	3	CS	3/10/20	10:50	0	0	n/a	63	1 W	none, overcast	
16	2	CS	3/11/20	9:55	0	0	n/a	54	0	none, clear	rooster
16	1	CS	3/12/20	10:41	0	0	n/a	64	0	none, clear	blue jays, black vultures
16	0	CS	3/13/20	11:52	0	0	n/a	68	2 SE	none, clear	
17	4	CS	3/9/20	8:50	0	0	n/a	52	0	none, clear	blue jay, roosters
17	3	CS	3/10/20	10:01	0	0	n/a	63	0	none, overcast	roosters
17	2	CS	3/11/20	8:40	0	0	n/a	54	0	none, clear	crow, roosters
17	1	CS	3/12/20	9:56	0	0	n/a	62	0	none, clear	roosters
17	0	CS	3/13/20	11:50	0	0	n/a	68	0	none, clear	black vulture, roosters
18	4	RP	3/9/20	11:39	0	0	n/a	71	3-4 E	none, clear	
18	3	RP	3/10/20	11:41	0	0	n/a	71	0-1 ESE	none, clear	
18	2	RP	3/11/20	10:57	0	0	n/a	70	1 E	none, clear	
18	1	RP	3/12/20	11:22	0	0	n/a	74	4 NE	none, clear	
18	0	RP	3/13/20	9:14	0	0	n/a	55	0	none, clear	black vulture
19	4	RP	3/9/20	11:25	0	0	n/a	63	0-3 SE	none, clear	
19	3	RP	3/10/20	11:32	0	0	n/a	71	0-1 ESE	none, clear	
19	2	RP	3/11/20	10:47	0	0	n/a	70	1 E	none, clear	
19	1	RP	3/12/20	11:16	0	0	n/a	74	4 NE	none, clear	mourning dove
19	0	RP	3/13/20	9:45	0	0	n/a	55	0	none, clear	
20	4	RP	3/9/20	11:05	0	0	n/a	63	4-6 E	none, clear	
20	3	RP	3/10/20	11:19	0	0	n/a	71	0	none, clear	
20	2	RP	3/11/20	10:33	0	0	n/a	69	0	none, clear	
20	1	RP	3/12/20	11:05	0	0	n/a	74	4 NE	none, clear	
20	0	RP	3/13/20	10:09	0	0	n/a	56	0	none, clear	
21	4	CS	3/9/20	9:25	0	0	n/a	52	4 SE	none, clear	crows, warblers
21	3	CS	3/10/20	10:20	0	0	n/a	63	1 W	none, overcast	black vultures
21	2	CS	3/11/20	9:10	0	0	n/a	54	2 NE	none, clear	crow
21	1	CS	3/12/20	10:14	0	0	n/a	62	2 E	none, clear	
21	0	CS	3/13/20	11:10	0	0	n/a	68	0	none, clear	
22	4	CS	3/9/20	9:10	0	0	n/a	52	0	none, clear	
22	3	CS	3/10/20	10:11	0	0	n/a	63	1 W	none, overcast	tufted titmouse, crows
22	2	CS	3/11/20	8:55	0	0	n/a	54	0	none, clear	fox squirrel, roosters, blue jay, eastern bluebird, crows
22	1	CS	3/12/20	10:04	0	0	n/a	62	0	none, clear	crow, crows
22	0	CS	3/13/20	11:00	0	0	n/a	68	0	none, clear	roosters, crows
23	4	CS	3/9/20	12:28	0	0	n/a	63	6 E	none, clear	rooster

Florida's Turnpike Enterprise

FPID# 442764-1

Call Station #	# of Surveys Needed	Reviewer	Date	Start Time	Adults Observed	Juveniles Observed	Direction of Flight	Temp. (F)	Wind Speed (mph) & Direction	Precipitation (PRCP) & Visibility	Notes
23	3	CS	3/10/20	12:10	0	0	n/a	68	2 W	none, overcast	roosters, cows
23	2	CS	3/11/20	11:55	0	0	n/a	69	2 E	none, clear	rooster
23	1	CS	3/12/20	12:00	0	0	n/a	68	2 N	none, clear	roosters
23	0	CS	3/13/20	8:58	0	0	n/a	54	0	none, clear	red bellied woodpecker
24	4	CS	3/9/20	12:50	0	0	n/a	63	6 E	none, clear	roosters
24	3	CS	3/10/20	12:20	0	0	n/a	68	2 E	none, overcast	roosters, cows
24	2	CS	3/11/20	12:05	0	0	n/a	69	0	none, clear	roosters
24	1	CS	3/12/20	12:10	0	0	n/a	68	2 N	none, clear	roosters
24	0	CS	3/13/20	9:04	0	0	n/a	54	0	none, clear	roosters, cows
25	4	CS	3/9/20	11:25	0	0	n/a	63	6 E	none, clear	
25	3	CS	3/10/20	11:20	0	0	n/a	68	2 E	none, overcast	
25	2	CS	3/11/20	10:50	0	0	n/a	69	0	none, clear	
25	1	CS	3/12/20	11:14	0	0	n/a	67	0	none, clear	roosters
25	0	CS	3/13/20	8:21	0	0	n/a	54	0	none, clear	
26	4	CS	3/9/20	11:10	0	0	n/a	63	6 E	none, clear	black vulture, crow
26	3	CS	3/10/20	11:17	0	0	n/a	68	2 E	none, overcast	crow
26	2	CS	3/11/20	10:45	0	0	n/a	69	0	none, clear	blue jays
26	1	CS	3/12/20	11:04	0	0	n/a	67	0	none, clear	
26	0	CS	3/13/20	8:13	0	0	n/a	54	0	none, clear	
27	4	CS	3/9/20	12:20	0	0	n/a	63	6 E	none, clear	roosters, black vulture, hawk (calls paused until hawk was gone)
27	3	CS	3/10/20	12:00	0	0	n/a	68	2 W	none, overcast	rooster, red bellied woodpecker, starlings
27	2	CS	3/11/20	11:40	0	0	n/a	69	0	none, clear	eastern phoebe?, red bellied woodpecker
27	1	CS	3/12/20	11:48	0	0	n/a	68	1 W	none, clear	blackk vulture
27	0	CS	3/13/20	8:50	0	0	n/a	54	0	none, clear	pine warbler, rred bellied woodpecker
28	4	CS	3/9/20	11:42	0	0	n/a	63	6 E	none, clear	roosters
28	3	CS	3/10/20	11:35	0	0	n/a	68	2 E	none, overcast	roosters
28	2	CS	3/11/20	11:10	0	0	n/a	69	0	none, clear	roosters
28	1	CS	3/12/20	11:24	0	0	n/a	67	0	none, clear	roosters
28	0	CS	3/13/20	8:29	0	0	n/a	54	0	none, clear	roosters
29	4	CS	3/9/20	12:01	0	0	n/a	63	6 E	none, clear	eastern phoebe?
29	3	CS	3/10/20	11:49	0	0	n/a	68	2 E	none, overcast	tufted titmouse, eastern phoebe?
29	2	CS	3/11/20	11:25	0	0	n/a	69	0	none, clear	black vulture, hawk (calls paused until hawk was gone)
29	1	CS	3/12/20	11:36	0	0	n/a	67	1 W	none, clear	crow
29	0	CS	3/13/20	8:39	0	0	n/a	54	0	none, clear	
30	4	RP	3/9/20	10:08	0	0	n/a	63	0	none, clear	black vulture
30	3	RP	3/10/20	9:19	0	0	n/a	63	0	none, overcast	
30	2	RP	3/11/20	8:58	0	0	n/a	56	0	none, clear	
30	1	RP	3/12/20	9:14	0	0	n/a	57	0	none, clear	
30	0	RP	3/13/20	11:13	0	0	n/a	71	0	none, clear	mockingbird

Reviewers: Rachel Peters (RP), Chris Stalder (CS)