

# FLORIDA SCRUB JAY SURVEY TECHNICAL REPORT

## Transwestern North Marion County, Florida



Prepared for:  
Transwestern Development Company  
3340 Peachtree Road NE, Suite 100  
Atlanta, GA 30326

**Kimley»Horn**

142933003

June 2022

© Kimley-Horn & Associates, Inc.  
101 East Silver Springs Boulevard, Suite 400  
Ocala, Florida 34470

CONTENTS

1.0 INTRODUCTION.....1

2.0 PROJECT DESCRIPTION .....1

3.0 METHODOLOGY .....1

4.0 HABITAT DESCRIPTIONS.....2

5.0 RESULTS.....2

6.0 SUMMARY .....6

TABLES

Table 1: Biologists Qualifications ..... 1

FIGURES

Figure 1: Site Location Map ..... 8

Figure 2: USGS Topographic Map ..... 9

Figure 3: FLUCFCS Map .....10

Figure 4: Scrub-Jay Station Location Map.....11

APPENDICES

- Appendix A – Photographic Log
- Appendix B – Transect Data Sheets

## 1.0 INTRODUCTION

This report provides the methodology, results, and conclusions of the 2022 Florida Scrub-Jay (*Aphelocoma coerulescens*) Survey for the Transwestern North site. Kimley-Horn & Associates, Inc. (Kimley-Horn) staff conducted a formal survey for the Florida scrub-jay between June 6, 2022 through June 10, 2022, utilizing the methods outlined in the Florida Scrub-Jay General Survey Guidelines and Protocols (2007) developed by the US Fish and Wildlife Service (USFWS) South Florida Ecological Services Office to determine the presence of scrub-jays. Thirty-six call stations were established within the survey area. Scrub-jays were found at five stations on the northern border of the site; however, it does not appear the scrub-jays are utilizing the project site and the proposed project is not anticipated to impact any scrub-jay habitat. Therefore, this project will have no effect on the Florida scrub-jay.

## 2.0 PROJECT DESCRIPTION

The project site sits on approximately 232 acres land in Sections 1, 2, 11 and 12, Township 17 south and Range 21 east, unincorporated Marion County, Florida. The site is located east of Southwest 29<sup>th</sup> Avenue Road, west of I-75 and south of the Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area. However, only an approximately 95.4-acre portion of the site was identified as having potential scrub-jay habitat. A location map is attached as **Figure 1** and a U.S. Geological Service (USGS) 7.5-Minute quadrangle map depicting the location of the project limits is attached as **Figure 2**. Based on the quad map, elevation within the project limits ranges from approximately 70-90 feet.

## 3.0 METHODOLOGY

### SCRUB-JAYS

The survey was conducted in accordance with USFWS *Florida Scrub-jay Survey Guidelines* (updated August 24, 2007). Surveys were conducted on June 6, 2022 through June 10, 2022. Habitat was mapped on the site using the *Florida Land Use, Cover and Forms Classification System* (FLUCFCS; FDOT, 1999), and is shown on see **Figure 3**. Surveys included five transects (A-E) with 36 stations. A station location map is attached as **Figure 4** and a photographic log is included in **Appendix A**.

Call stations were established along each transect, approximately 100-150 meters apart, to ensure vocalizations could be heard throughout the transect (**Figure 4**). Scrub-jay vocalizations were played at each call station for one minute, in each cardinal direction. Biologists played the call and observed activity at each call station, while subsequently recording the results on a standardized data sheet (See **Appendix B**). Biologists' qualifications are listed below in **Table 1**.

Table 1: Biologists Qualifications

Biologist Name	Years Birding Experience	Years Conducting Florida Scrub-Jay Surveys
Steven Brighton	8	5
Cassandra O'Donahue	6	1

## 4.0 HABITAT DESCRIPTIONS

Florida scrub-jay habitats include xeric oak scrub, scrubby pine flatwoods, and sand pine scrub (USFWS 2007). In addition, scrub-jay habitat can also include pine-mesic oak, citrus groves, pine flatwoods, longleaf pine – xeric oak, sand pine, and even some rangelands. The presence of scrub oaks, no matter how sparsely distributed, is a key indicator of scrub habitat (USFWS 2007). In optimal habitat, scrub oaks like sand live oak (*Quercus geminata*), Chapman oak (*Q. chapmanii*), myrtle oak (*Q. myrtifolia*), and scrub oak (*Q. inopina*) are 1 to 3 meters high, interspersed with 10 to 50 percent unvegetated, sandy openings, a sand pine (*Pinus clausa*) canopy less than 20 percent and few herbaceous plants (USFWS 1999). Other plants associated with optimal scrub-jay habitat include saw palmetto (*Serenoa repens*) as well as rusty lyonia (*Lyonia ferruginea*). Suboptimal habitat includes scrub habitats where the oak species are more dense or taller than optimal habitat. Fitzpatrick et al. (1991) delineated three classes of scrub jay habitat:

- Type I – Any upland plant community where scrub oak species  $\geq$  15 percent cover.
- Type II – Any plant community where one or more scrub oak species is present but  $\leq$  15 percent cover.
- Type III – Any upland or seasonally dry wetland within 400 meters (0.25 miles) of any area designated as Type I or Type II habitat.

The project site contains Type II habitat on the west half of the property, mapped as FLUCFCS 434, Hardwood – Conifer Mixed. This area contains less than 15 percent cover of scrub oak species such as sand live oak and myrtle oak that are between 1 to 3 meters high and less than 20 percent sand pine canopy. There are few unvegetated, sandy openings but understory plants such as saw palmetto and rusty lyonia are present throughout. The site contains additional areas of FLUCFCS 434 Hardwood – Conifer mixed on the east half of the project site; however, these areas generally lack scrub oaks and consist of more mature hardwood species that create a tall, dense canopy with a dense understory of herbaceous vegetation and no open sandy areas. Therefore, this area does not contain suitable nesting or foraging habitat for the scrub-jay and was not included in this survey.

## 5.0 RESULTS

### SCRUB-JAY

The results of the scrub-jay surveys are described below and included in the data sheets in **Appendix B**. Surveys were conducted in the mornings from about 7 a.m. to noon on June 6, 2022 through June 10, 2022. Weather conditions were generally favorable, with some rain delays on June 10<sup>th</sup>.

### A1 RESULTS

On June 6<sup>th</sup> at 7:15 a.m., two scrub-jays flew in towards the station from the north while vocalizing. Both flew to the trees along the fence line to the site but did not go further south, into the site. On June 7<sup>th</sup> at 11:11 a.m., two scrub-jays flew in from the north while vocalizing and flying back and forth around scrubby oaks to the north of the site. One of the scrub-jays flew south, towards the speaker, knocking it over and landing in the tree above it, while vocalizing. Both scrub-jays stayed along the trees at the fence line but did not go further south into the site. Scrub-jays were not observed at this station on June 8<sup>th</sup>. On June 9<sup>th</sup> at 7:46 a.m., two scrub-jays flew in from the north, landing on trees on the north perimeter of the site while vocalizing and hopping. Biologists moved south into site and scrub-jays did not follow. On June 10<sup>th</sup> at 8:48 a.m. three scrub-jays flew in from the north but did not vocalize. The scrub-jays stayed along the scrubby oaks to the north of the site and did not enter the site.



**A2 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**A3 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**A4 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**A5 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**A6 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**B1 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location June 6<sup>th</sup> through June 8<sup>th</sup>. On June 9<sup>th</sup>, at 8:06 a.m., two scrub jays observed at A1 flew in from the west while vocalizing. On June 10<sup>th</sup> at 8:42 a.m., three scrub jays flew in from the east while vocalizing and stopped approximately halfway between B1 and C3. Scrub-jays did not fly on-site during these observations.

**B2 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**B3 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**B4 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**B5 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**B6 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**B7 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C1 RESULTS**

No vocalizations or observance of scrub-jays were noted at this station June 6<sup>th</sup> through June 7<sup>th</sup>. On June 8<sup>th</sup> at 8:05 a.m., scrub-jay vocalizations were heard from the northwest when the taped vocalization was played at the station. Scrub-jays did not approach the station. When the biologist moved north, off-site, two scrub-jays were observed vocalizing and flying around the scrub oaks. No scrub-jays were observed at this station June 9<sup>th</sup>-10<sup>th</sup>.

**C2 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location June 6<sup>th</sup> – 9<sup>th</sup>. On June 10<sup>th</sup> at 8:21 a.m., three scrub-jays flew in from the west while clacking and vocalizing. They remained on the trees along the perimeter of the site while the biologist walked west into the site.

**C3 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location June 6<sup>th</sup> – 9<sup>th</sup>. On June 10<sup>th</sup> at 8:28 a.m., three scrub-jays flew in from the north along the edge of the property while vocalizing. The scrub-jays remained along the perimeter of the property while the biologist moved south into the property.

**C4 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C5 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C6 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C7 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C8 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C9 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**C10 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D1 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D2 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D3 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D4 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D5 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D6 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D7 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**D8 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**E1 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**E2 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**E3 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**E4 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**E5 RESULTS**

No vocalizations or observance of scrub-jays were noted at this location throughout the survey.

**OTHER WILDLIFE SPECIES OBSERVED**

Several other bird species were observed during surveys. Birds observed, other than scrub-jays included American crows (*Corvus brachyrhynchos*), blue jays (*Cyanocitta cristata*), northern cardinals (*Cardinalis cardinalis*), common nighthawk (*Chordeiles minor*), red-bellied woodpeckers (*Melanerpes carolinus*), downy woodpecker (*Dryobates pubescens*), pileated woodpecker (*Dryocopus pileatus*), Carolina

chickadees (*Poecile carolinensis*), turkey vultures (*Cathartes aura*), Carolina wren (*Thryothorus ludovicianus*), pine warbler (*Setophaga pinus*), northern mockingbirds (*Mimus polyglottos*), brown thrasher (*Toxostoma rufum*), blue-gray gnatcatchers (*Poliophtila caerulea*), eastern towhee (*Pipilo erythrophthalmus*), swallow-tailed kite (*Elanoides forficatus*), mourning doves (*Zenaida macroura*), and common ground doves (*Columbina passerina*).

## 6.0 SUMMARY

Suitable habitats for the Florida scrub-jay within the project site were surveyed between June 6, 2022 through June 10, 2022 in accordance with the *Florida Scrub-Jay General Survey Guidelines and Protocols* (USFWS, 2007). Based on this 5-day survey, it appears that scrub-jays are residing, and defending only off-site habitat to the north of stations A1 and B1, and west of stations C1 through C3. While scrub-jays would land on trees along the perimeter of the site, they would not follow biologists into the site and did not appear at any stations in the interior of the site. As the habitat north of stations A1 and B1 and west of stations C1 through C3 contains a large expanse of low scrubby xeric oak and appears to be prime scrub-jay habitat, it is not anticipated that scrub-jays would use the project site for foraging or nesting, as on-site habitat is lower quality and overgrown with large canopy trees. Therefore, based on the June 2022 survey, it has been determined that the proposed project will have no effect on the Florida scrub-jay.



---

---

## FIGURES

---

---

Marion County

Ocala

Project Location

0 500 1,000  
Feet



**Legend**

- Project Location (±232.3 acres)
- Scrub-Jay Survey Boundary (±95.4 acres)

Source: ESRI, FDOT, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

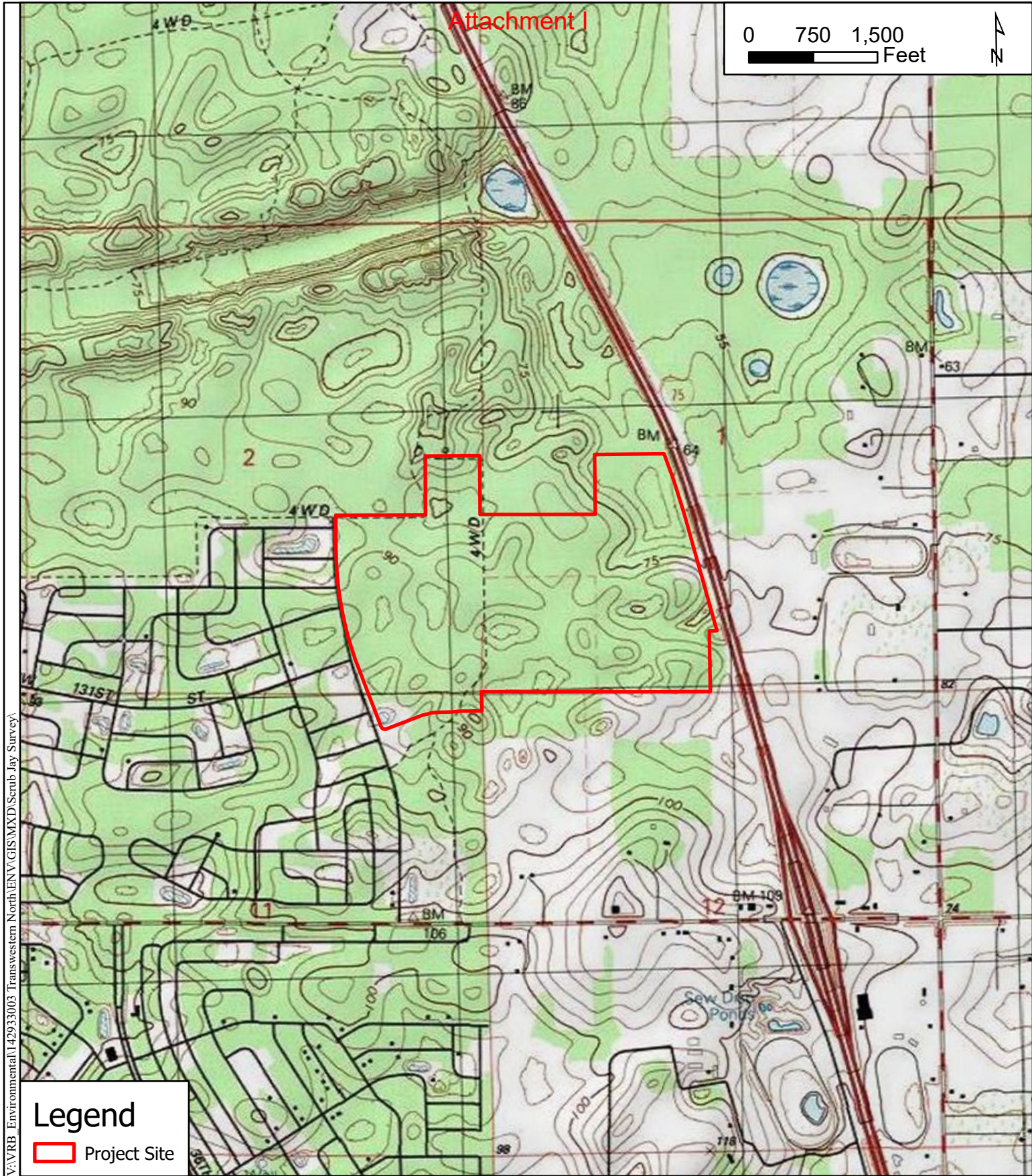
**Kimley»Horn**

© 2022 Kimley-Horn and Associates, Inc.  
101 E Silver Springs Boulevard, Unit 400  
Ocala, FL 34470  
Phone (352) 438-3000  
www.kimley-horn.com

**Project Location Map**

**Transwestern North  
Marion County, Florida**





**Kimley»Horn**

© 2022 Kimley-Horn and Associates, Inc.  
 101 E Silver Springs Boulevard, Unit 400  
 Ocala, FL 34470  
 Phone (352) 438-3000  
 www.kimley-horn.com

**USGS Topographic Map**

**Transwestern North  
 Marion County, Florida**

1 inch = 1,500 feet

111

PROJECT NUMBER: 142933003

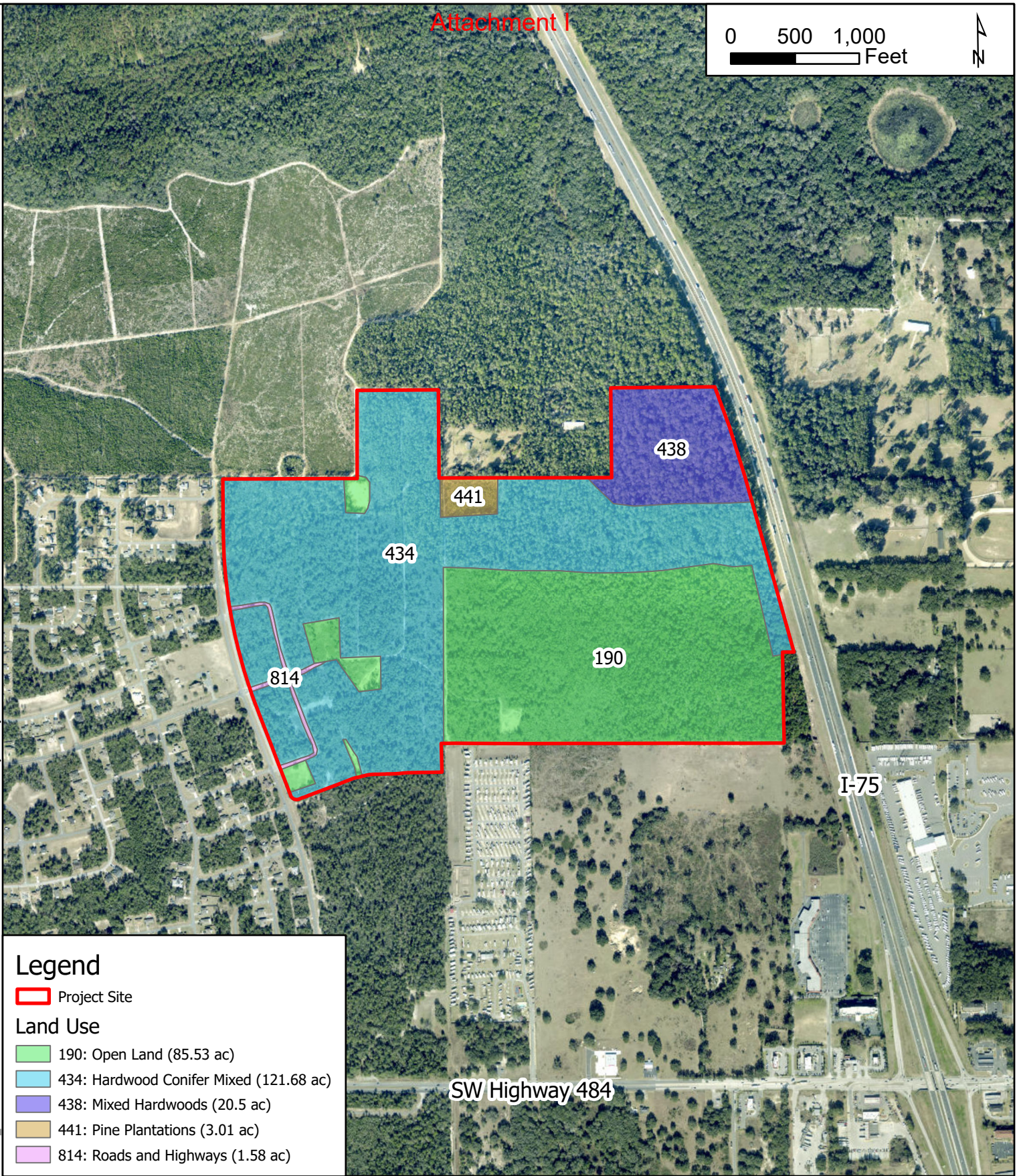
JUNE 2022

FIGURE 2





V:\VRB\_Environmental\142933003 Transwestern North\ENV\GIS\MXD\Scrub Jay Survey\



Source: ESRI, FDOT, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

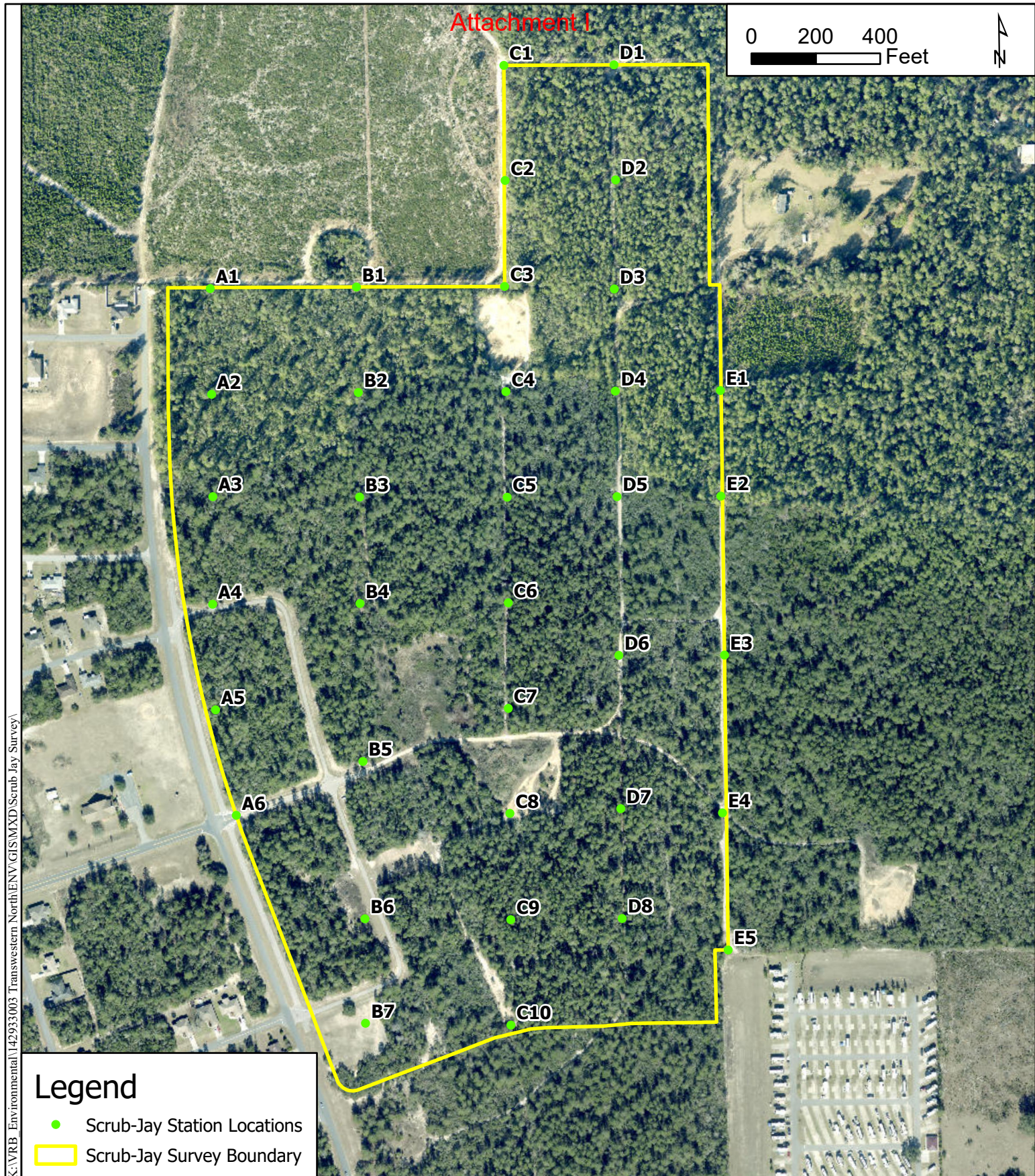
# Kimley»Horn

© 2022 Kimley-Horn and Associates, Inc.  
101 E Silver Springs Boulevard, Unit 400  
Ocala, FL 34470  
Phone (352) 438-3000  
www.kimley-horn.com

## Florida Land Use, Cover and Forms, Classification System Map

**Transwestern North  
Marion County, Florida**





## Scrub-Jay Station Location Map

**Kimley»Horn**

© 2022 Kimley-Horn and Associates, Inc.  
101 E Silver Springs Boulevard, Unit 400  
Ocala, FL 34470  
Phone (352) 438-3000  
www.kimley-horn.com

**Transwestern North  
Marion County, Florida**

1 inch = 400 feet

113

PROJECT NUMBER: 142933003

JUNE 2022

FIGURE 4



---

---

## APPENDICES

---

---

---

---

## APPENDIX A: PHOTOGRAPHIC LOG

---

---





Representative photo of stations A1-A6.



Representative photo of stations B1-B4.

**PHOTOGRAPHIC LOG OF SURVEY STATIONS**

Transwestern North  
Marion County, Florida **I16**

**Kimley»Horn**





Representative photo of C1-C3.



Representative photo of stations C4-C7, D5-D6.

**PHOTOGRAPHIC LOG OF SURVEY STATIONS**

Transwestern North  
Marion County, Florida **I17**

**Kimley»Horn**



Attachment I



Representative photo of stations B5-B7, C8-C10, and D7-D8.



Representative photo of stations D1-D5.

PHOTOGRAPHIC LOG OF SURVEY STATIONS

Transwestern North  
Marion County, Florida I18

Kimley»Horn





Representative photo of stations E1-E3.



Representative photo of stations E4-E5.

**PHOTOGRAPHIC LOG OF SURVEY STATIONS**

Transwestern North  
Marion County, Florida **I19**

**Kimley»Horn**



Attachment I



Representative photos of habitat to the north of the project area near A1 & B1.



Representative photos of habitat to the west of C1-C3.

PHOTOGRAPHIC LOG OF SURVEY STATIONS

Transwestern North  
Marion County, Florida I20

Kimley»Horn



---

---

## APPENDIX B:

## TRANSECT DATA SHEETS

---

---

# Attachment I

<b>Scrub Jay Survey Data Sheet</b>				
<b>Site Name:</b>	<u>Transwestern North</u>	<b>Project No.</b>	<u>142933003</u>	
<b>Observer:</b>	<u>Cassandra O'Donahue</u>	<b>Arrival Time:</b>	<u>7:10am</u>	
<b>Date:</b>	<u>6/6/2022</u>	<b>Departure Time:</b>	<u>11:40am</u>	
<b>Weather Conditions:</b> <u>72°F, wind NNW 1mph; clear; no clouds</u>				
Transect No.	Call Station Designation	Start Time	End Time	Observations
A	1	7:15	7:21	Two (2) scrub-jays flew in from the north calling; flew to pines along fenceline but did not fly on-site; other birds observed: northern cardinal
A	2	7:24	7:28	Scrub-jay calls heard to the northeast but did not approach the station; other birds observed: northern cardinal, eastern towhee
A	3	7:32	7:36	Birds observed: eastern towhee
A	4	7:40	7:44	Birds observed: eastern towhee
A	5	7:50	7:54	Birds observed: blue-gray gnatcatcher, northern cardinal
A	6	7:55	7:59	Birds observed: mourning dove, eastern towhee
B	7	8:01	8:05	Birds observed: northern mockingbird
B	6	8:07	8:11	Birds observed: eastern towhee
B	5	8:13	8:17	Birds observed:
B	4	8:24	8:28	Birds observed: American crow, eastern towhee, blue jay
B	3	8:32	8:36	Birds observed: eastern towhee, American crow
B	2	8:38	8:42	Birds observed: American crow, blue-gray gnatcatcher
B	1	8:47	8:52	Birds observed:
C	1	8:58	9:02	Birds observed: eastern towhee
C	2	9:03	9:07	Birds observed: turkey vulture
C	3	9:09	9:13	Birds observed:
C	4	9:15	9:19	Birds observed: blue jay, eastern towhee, blue-gray gnatcatcher
C	5	9:20	9:24	Birds observed: eastern towhee, blue jay
C	6	9:26	9:30	Birds observed: eastern towhee
C	7	9:32	9:36	Birds observed: eastern towhee, American crow
NOTES:				

# Attachment I

## Scrub Jay Survey Data Sheet

**Site Name:** Transwestern North  
**Observer:** Cassandra O'Donahue  
**Date:** 6/6/2022

**Project No.** 142933003  
**Arrival Time:** 7:10am  
**Departure Time:** 11:40am

**Weather**

**Conditions:** 72°F, wind NNW 1mph; clear; no clouds

Transect No.	Call Station Designation	Start Time	End Time	Observations
C	8	9:46	9:50	Birds observed: cattle egret flyover
C	9	9:54	9:58	Birds observed: eastern towhee
C	10	10:03	10:07	Birds observed:
D	6	10:14	10:18	Birds observed:
D	5	10:20	10:24	Birds observed:
D	4	10:25	10:29	Birds observed:
D	3	10:30	10:34	Birds observed: American crow, blue jay
D	2	10:35	10:39	Birds observed: northern mockingbird, eastern towhee, American crow, red-bellied woodpecker
D	1	10:41	10:45	Birds observed: eastern towhee
E	1	10:49	10:53	Birds observed: American crow
E	2	10:54	10:58	Birds observed:
E	3	10:59	11:03	Birds observed: American crow, northern cardinal, eastern towhee
E	4	11:05	11:09	Birds observed: eastern towhee
E	5	11:10	11:14	Birds observed: northern mockingbird
D	7	11:21	11:25	Birds observed: eastern towhee
D	8	11:27	11:31	Birds observed: eastern towhee, mourning dove
NOTES:				

# Attachment I

<b>Scrub Jay Survey Data Sheet</b>				
<b>Site Name:</b>	<u>Transwestern North</u>	<b>Project No.</b>	<u>142933003</u>	
<b>Observer:</b>	<u>Cassandra O'Donahue</u>	<b>Arrival Time:</b>	<u>7:12am</u>	
<b>Date:</b>	<u>6/7/2022</u>	<b>Departure Time:</b>	<u>11:15am</u>	
<b>Weather Conditions:</b>	<u>70°F, wind NNW 2mph; clear; no clouds</u>			
Transect No.	Call Station Designation	Start Time	End Time	Observations
E	5	7:16	7:20	Birds observed: American crow
E	4	7:21	7:25	Birds observed: American crow, eastern towhee
E	3	7:27	7:31	Birds observed: eastern towhee
E	2	7:33	7:37	Birds observed: American crow, eastern towhee, cattle egret flyover
E	1	7:38	7:42	Birds observed: eastern towhee
D	1	7:44	7:48	Birds observed: northern cardinal
D	2	7:50	7:54	Birds observed:
D	3	8:00	8:04	Birds observed:
D	4	8:05	8:09	Birds observed: American crow, eastern towhee
D	5	8:10	8:14	Birds observed:
D	6	8:15	8:19	Birds observed:
D	7	8:23	8:27	Birds observed: American crow
D	8	8:28	8:32	Birds observed: American crow
C	10	8:42	8:46	Birds observed: northern cardinal, eastern towhee
C	9	8:48	8:52	Birds observed: eastern towhee
C	8	8:54	8:58	Birds observed: mourning dove, American crow
C	7	9:01	9:05	Birds observed: northern cardinal
C	6	9:06	9:10	Birds observed: eastern towhee
C	5	9:12	9:16	Birds observed:
C	4	9:18	9:22	Birds observed: eastern towhee
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 15%;">NOTES:</div> <div style="width: 85%;"></div> </div>				

## Attachment I

## Scrub Jay Survey Data Sheet

Site Name: Transwestern North  
 Observer: Cassandra O'Donahue  
 Date: 6/7/2022

Project No. 142933003  
 Arrival Time: 7:12am  
 Departure Time: 11:15am

## Weather

Conditions: 70°F, wind NNW 2mph; clear; no clouds

Transect No.	Call Station Designation	Start Time	End Time	Observations
C	3	9:23	9:27	Birds observed:
C	2	9:29	9:33	Birds observed: turkey vulture
C	1	9:36	9:40	Birds observed:
B	1	9:44	9:48	Birds observed: swallow-tailed kite flyover
B	2	9:53	9:57	Birds observed:
B	3	9:59	10:03	Birds observed:
B	4	10:05	10:09	Birds observed: northern cardinal
B	5	10:13	10:17	Birds observed: northern cardinal, eastern towhee
B	6	10:20	10:24	Birds observed:
B	7	10:25	10:29	Birds observed:
A	6	10:31	10:35	Birds observed:
A	5	10:36	10:40	Birds observed:
A	4	10:41	10:45	Birds observed:
A	3	10:49	10:53	Birds observed:
A	2	10:58	11:02	Birds observed:
A	1	11:07	11:11	Two (2) scrub-jays flew in from the north calling and flying amongst scrubby oaks in parcel to the north; one scrub-jay flew in towards the station and knocked the speaking playing scrub-jay vocalizations off of the post it was sitting on; both scrub-jays stayed along the trees at the fenceline
NOTES:				

# Attachment I

<b>Scrub Jay Survey Data Sheet</b>				
<b>Site Name:</b>	<u>Transwestern North</u>	<b>Project No.</b>	<u>142933003</u>	
<b>Observer:</b>	<u>Cassandra O'Donahue</u>	<b>Arrival Time:</b>	<u>7:10am</u>	
<b>Date:</b>	<u>6/8/2022</u>	<b>Departure Time:</b>	<u>11:31am</u>	
<b>Weather Conditions:</b> <u>74°F, wind SSE 2mph; clear; no clouds</u>				
Transect No.	Call Station Designation	Start Time	End Time	Observations
B	7	7:11	7:15	Birds observed: American crow, eastern towhee, mourning dove
B	6	7:17	7:21	Birds observed: American crow
B	5	7:24	7:28	Birds observed:
B	4	7:34	7:38	Birds observed: eastern towhee
B	3	7:39	7:43	Birds observed: eastern towhee
B	2	7:46	7:50	Birds observed: eastern towhee
B	1	7:56	8:00	Birds observed: eastern towhee
C	1	8:05	8:09	Scrub-jay calls heard from the northwest but did not approach; when biologist moved north (off-site), two (2) scrub-jays were observed vocalizing in scrubby oaks; other birds observed: eastern towhee
C	2	8:15	8:19	Birds observed: eastern towhee
C	3	8:21	8:25	Birds observed: red-bellied woodpecker, eastern towhee, American crow
C	4	8:27	8:31	Birds observed: eastern towhee
C	5	8:32	8:36	Birds observed: eastern towhee
C	6	8:38	8:42	Birds observed: eastern towhee
C	7	8:43	8:47	Birds observed: eastern towhee
C	8	8:50	8:54	Birds observed:
C	9	8:57	9:01	Birds observed:
C	10	9:02	9:06	Birds observed: American crow
D	7	9:19	9:23	Birds observed: northern cardinal, eastern towhee
D	8	9:25	9:29	Birds observed: eastern towhee
D	6	9:36	9:40	Birds observed: mourning dove, pine warbler
NOTES:				



## Attachment I

## Scrub Jay Survey Data Sheet

Site Name: Transwestern North  
 Observer: Cassandra O'Donahue  
 Date: 6/8/2022

Project No. 142933003  
 Arrival Time: 7:10am  
 Departure Time: 11:31am

## Weather

Conditions: 74°F, wind SSE 2mph; clear; no clouds

Transect No.	Call Station Designation	Start Time	End Time	Observations
D	5	9:42	9:46	Birds observed: American crow, turkey vulture
D	4	9:47	9:51	Birds observed:
D	3	9:52	9:56	Birds observed: pileated woodpecker, eastern towhee, American crow
D	2	9:58	10:02	Birds observed: eastern towhee
D	1	10:03	10:07	Birds observed: American crow, eastern towhee
E	1	10:11	10:15	Birds observed: turkey vulture, eastern towhee, American crow, carolina wren
E	2	10:16	10:20	Birds observed: eastern towhee
E	3	10:22	10:26	Birds observed: eastern towhee
E	4	10:33	10:37	Birds observed:
E	5	10:39	10:43	Birds observed:
A	1	10:55	10:59	Birds observed: brown thrasher
A	2	11:05	11:09	Birds observed: American crow
A	3	11:11	11:15	Birds observed: eastern towhee
A	4	11:16	11:20	Birds observed: eastern towhee
A	5	11:21	11:25	Birds observed: eastern towhee
A	6	11:27	11:31	Birds observed:
NOTES:				

# Attachment I

<b>Scrub Jay Survey Data Sheet</b>				
<b>Site Name:</b>	<u>Transwestern North</u>	<b>Project No.</b>	<u>142933003</u>	
<b>Observer:</b>	<u>Cassandra O'Donahue</u>	<b>Arrival Time:</b>	<u>7:10am</u>	
<b>Date:</b>	<u>6/9/2022</u>	<b>Departure Time:</b>	<u>11:35am</u>	
<b>Weather</b>				
<b>Conditions:</b>	<u>75°F; no wind; 25% cumulus clouds; light haze due to nearby fire</u>			
Transect No.	Call Station Designation	Start Time	End Time	Observations
A	6	7:12	7:16	Birds observed: eastern towhee, American crow
A	5	7:17	7:21	Birds observed: northern cardinal, American crow
A	4	7:22	7:26	Birds observed: northern cardinal, American crow
A	3	7:27	7:31	Birds observed: northern cardinal, American crow, eastern towhee
A	2	7:33	7:37	Birds observed: northern cardinal, American crow, eastern towhee
A	1	7:46	7:50	Two (2) scrub-jays flew in from the north, landing on scrub trees in parcel to the north while vocalizing and hopping; biologist moved south into project areas and scrub-jays did not follow; scrub-jays did not enter site
B	1	8:06	8:10	Two (2) scrub-jays from A1 flew in from the west, vocalizing. Remained north of the project area.
C	3	8:12	8:16	Birds observed: red-bellied woodpecker, eastern towhee, mourning dove
C	2	8:19	8:23	Birds observed: downy woodpecker, eastern towhee, common ground dove, blue-gray gnatcatcher
C	1	8:29	8:33	Birds observed: eastern towhee, northern cardinal
C	4	8:38	8:42	Birds observed: eastern towhee, American crow
C	5	8:43	8:47	Birds observed: eastern towhee
C	6	8:49	8:53	Birds observed: eastern towhee
C	7	8:55	8:59	Birds observed: eastern towhee, common ground dove, northern cardinal
C	8	9:02	9:06	Birds observed: eastern towhee, common ground dove
C	9	9:09	9:13	Birds observed: eastern towhee, common ground dove
C	10	9:15	9:19	Birds observed: eastern towhee
B	7	9:25	9:29	Birds observed: turkey vulture, eastern towhee
B	6	9:30	9:34	Birds observed: eastern towhee
B	5	9:37	9:41	Birds observed: eastern towhee, common ground dove, northern cardinal
<b>NOTES:</b>				

# Attachment I

## Scrub Jay Survey Data Sheet

**Site Name:** Transwestern North  
**Observer:** Cassandra O'Donahue  
**Date:** 6/9/2022

**Project No.** 142933003  
**Arrival Time:** 7:10am  
**Departure Time:** 11:35am

**Weather**

**Conditions:** 75°F; no wind; 25% cumulus clouds; light haze due to nearby fire

Transect No.	Call Station Designation	Start Time	End Time	Observations
B	4	9:46	9:50	Birds observed: eastern towhee
B	3	9:51	9:55	Birds observed: eastern towhee
B	2	9:57	10:01	Birds observed: American crow, common ground dove, eastern towhee
D	7	10:16	10:20	Birds observed: northern cardinal, eastern towhee, American crow
D	8	10:22	10:26	Birds observed: northern cardinal, eastern towhee
E	5	10:30	10:34	Birds observed:
E	4	10:40	10:44	Birds observed: eastern towhee
E	3	10:47	10:51	Birds observed: American crow, eastern towhee
E	2	10:52	10:56	Birds observed: eastern towhee
E	1	10:57	11:01	Birds observed: eastern towhee
D	1	11:03	11:07	Birds observed: carolina chickadee, eastern towhee
D	2	11:08	11:12	Birds observed:
D	3	11:13	11:17	Birds observed: American crow, eastern towhee
D	4	11:18	11:22	Birds observed: American crow, eastern towhee
D	5	11:23	11:27	Birds observed: American crow, eastern towhee
D	6	11:28	11:32	Birds observed: eastern towhee
NOTES:				



Scrub Jay Survey Data Sheet					
<b>Site Name:</b>		Transwestern North		<b>Project No.</b>	142933003
<b>Observer:</b>		Cassandra O'Donahue			
<b>Date:</b>		6/10/2022		<b>Arrival Time:</b>	7:09am
				<b>Departure Time:</b>	11:50am
<b>Weather</b>					
<b>Conditions:</b>		77°F; wind S 4mph; 60% cumulus clouds; light intermittent rain			
Transect No.	Call Station Designation	Start Time	End Time	Observations	
D	7	7:16	7:20	Birds observed: American crow, eastern towhee	
D	8	7:22	7:26	Birds observed: eastern towhee	
D	6	7:30	7:34	Birds observed: eastern towhee	
D	5	7:35	7:39	Birds observed: American crow, eastern towhee	
D	4	7:49	7:53	Birds observed: eastern towhee	
D	3	7:54	7:58	Birds observed: northern cardinal, eastern towhee	
D	2	7:59	8:03	Birds observed: eastern towhee	
D	1	8:04	8:08	Birds observed: eastern towhee	
C	1	8:11	8:15	Birds observed: common nighthawk, eastern towhee	
C	2	8:21	8:25	Three (3) scrub-jays flew in from the west, clacking and vocalizing - did not fly on-site; other birds observed: common nighthawk, eastern towhee	
C	3	8:28	8:32	Three (3) scrub-jays flew in from the north along the perimeter of the property while vocalizing; scrub-jays stayed on the perimeter of site while biologist moved south into site.	
B	1	8:42	8:46	Three (3) scrub-jays flew in from the east while vocalizing and stopped about halfway between C3 and B1; scrub-jays did not fly on-site.	
A	1	8:48	8:54	Three (3) scrub-jays flew in from the north, not vocalizing - did not fly on-site; other birds observed: American crow, common nighthawk, common ground dove	
B	2	9:27	9:31	Birds observed: American crow, eastern towhee	
B	3	9:32	9:36	Birds observed: eastern towhee	
B	4	9:38	9:42	Birds observed: American crow, eastern towhee	
B	5	9:45	9:49	Birds observed: eastern towhee	
C	10	9:54	9:59	Birds observed: eastern towhee	
C	9	10:00	10:04	Birds observed: northern cardinal, eastern towhee, American crow	
C	8	10:06	10:10	Birds observed: northern cardinal, eastern towhee, American crow	
NOTES: Pause between A1 and B2 due to rain					

# Attachment I

## Scrub Jay Survey Data Sheet

**Site Name:** Transwestern North  
**Observer:** Cassandra O'Donahue  
**Date:** 6/10/2022

**Project No.** 142933003  
**Arrival Time:** 7:09am  
**Departure Time:** 11:50am

**Weather**

**Conditions:** 77°F; wind S 4mph; 60% cumulus clouds; light intermittent rain

Transect No.	Call Station Designation	Start Time	End Time	Observations
C	7	10:13	10:17	Birds observed: American crow, eastern towhee
C	6	10:21	10:25	Birds observed: American crow, eastern towhee
C	5	10:26	10:30	Birds observed: eastern towhee
C	4	10:31	10:35	Birds observed: American crow, eastern towhee
E	1	10:41	10:45	Birds observed: American crow, eastern towhee
E	2	10:46	10:50	Birds observed: northern cardinal, American crow, eastern towhee
E	3	10:51	10:55	Birds observed: American crow, eastern towhee
E	4	10:56	11:00	Birds observed: mourning dove, American crow, eastern towhee
E	5	11:00	11:04	Birds observed: American crow
B	6	11:07	11:11	Birds observed: northern cardinal, eastern towhee
B	7	11:11	11:15	Birds observed: northern cardinal, eastern towhee
A	6	11:16	11:20	Birds observed: northern cardinal
A	5	11:21	11:25	Birds observed: mourning dove, northern cardinal, eastern towhee
A	4	11:26	11:30	Birds observed: American crow, eastern towhee
A	3	11:30	11:34	Birds observed: northern cardinal, eastern towhee
A	2	11:45	11:49	Birds observed: eastern towhee
NOTES: Pause between A3 and A2 due to rain				