

**APPENDIX A**  
**Field Data Forms**

This page intentionally left blank.

## SWFL SURVEY AND DETECTION FORM

Site Name (specific to patch) \_\_\_\_\_ Date \_\_\_\_\_

Observer(s) \_\_\_\_\_ UTM Zone \_\_\_\_\_

<b>Start</b>	<b>Stop</b>
Time _____	Time _____
UTM E 0 _____ N _____	UTM E 0 _____ N _____

Intermediate Waypoints			
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____
UTM E 0 _____	N _____	UTM E 0 _____	N _____

SWFL Detections				
UTM E 0 _____	N _____	Banded? Y N U	Pair? Y N	Nest Found? Y N
Comments _____				
UTM E 0 _____	N _____	Banded? Y N U	Pair? Y N	Nest Found? Y N
Comments _____				
UTM E 0 _____	N _____	Banded? Y N U	Pair? Y N	Nest Found? Y N
Comments _____				
UTM E 0 _____	N _____	Banded? Y N U	Pair? Y N	Nest Found? Y N
Comments _____				

Survey Summary				
Total survey hours _____	# SWFLS found _____	Est. # Pairs _____	Est. # Territories _____	
Playbacks used? Y or N	Cowbirds Detected? Y or N	If Y, approx # _____		
Sign of Livestock? Y or N If yes, explain _____				

<b>Additional Comments</b> _____
_____
_____
_____
_____

**LCR SWFL SURVEY AND DETECTION FORM 2004 – Additional Detections**

**Site Name** (specific to patch) \_\_\_\_\_ **Date** \_\_\_\_\_

**SWFL Detections**

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

UTM E \_\_\_\_\_ N \_\_\_\_\_ Pair? Y or N Nest Found? Y or N

Comments \_\_\_\_\_

### SWFL General Site Description

(Complete at least 3 times during season: early (15–25 May), mid-season (10–25 June), and late season (10–25 July))

Site name: \_\_\_\_\_ Date (MM/DD/YY): \_\_\_\_\_

Observer(s): \_\_\_\_\_ early \_\_\_\_\_ mid \_\_\_\_\_ late \_\_\_\_\_ other \_\_\_\_\_

Vegetation at site: >90% native      50-90% native      50-90% exotic      >90% exotic

Canopy closure: <25%      25-50%      50-70%      70-90%      >90%

Dominant overstory species: TASP      SAGO      SAEX      POFR      Other \_\_\_\_\_

Overstory height (m): \_\_\_\_\_

Dominant understory species: TASP      SAGO      SAEX      PLSE      Other \_\_\_\_\_

Understory height (m): \_\_\_\_\_

Other vegetation types present (e.g., cattail)?      Yes      No

If yes, type of vegetation: \_\_\_\_\_ percentage of site: \_\_\_\_\_

type of vegetation: \_\_\_\_\_ percentage of site: \_\_\_\_\_

type of vegetation: \_\_\_\_\_ percentage of site: \_\_\_\_\_

% of site inundated: \_\_\_\_\_

Depth of surface water: toes (<5cm)      ankles (5-15 cm)      calves (15-40 cm)      knees (40-60 cm)  
thighs (60-80 cm)      waist (100 cm)      too deep to wade (>100 cm)

% of site with saturated soils: \_\_\_\_\_

If not inundated, distance to standing water or saturated soil (m): \_\_\_\_\_

Give a narrative description of the site, including adjacent habitats:

---

---

---

---

---

---

---

---

---

---

Additional comments: \_\_\_\_\_

---

---

---

---

---

---

---

---

---

---

SITE: \_\_\_\_\_ BANDER: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ TERR AND NEST #: \_\_\_\_\_ NBN: \_\_\_\_\_ of \_\_\_\_\_ nestlings banded.

NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

FEDERAL BAND #	COLOR COMBO		STATUS	SEX	CAP	B P	AGE AHY, SY, L, or HY	FECAL SAMPLE? (Y or N)	BLOOD SAMPLES? (G and/or S)	FEATHER SAMPLE? (Y or N)	WING CHORD	TAIL	CULMEN LENGTH	CULMEN WIDTH	F A T	MASS
	L	R														

**Retained Feathers Present:** Yes or No (circle) – if Yes use diagram below

**Active Molt:** Yes or No (circle) – if Yes use diagram below

**Tail older (more worn) than PPs and SSs?** Yes or No (Circle)

**Colorimeter sample:** Yes or No (circle)

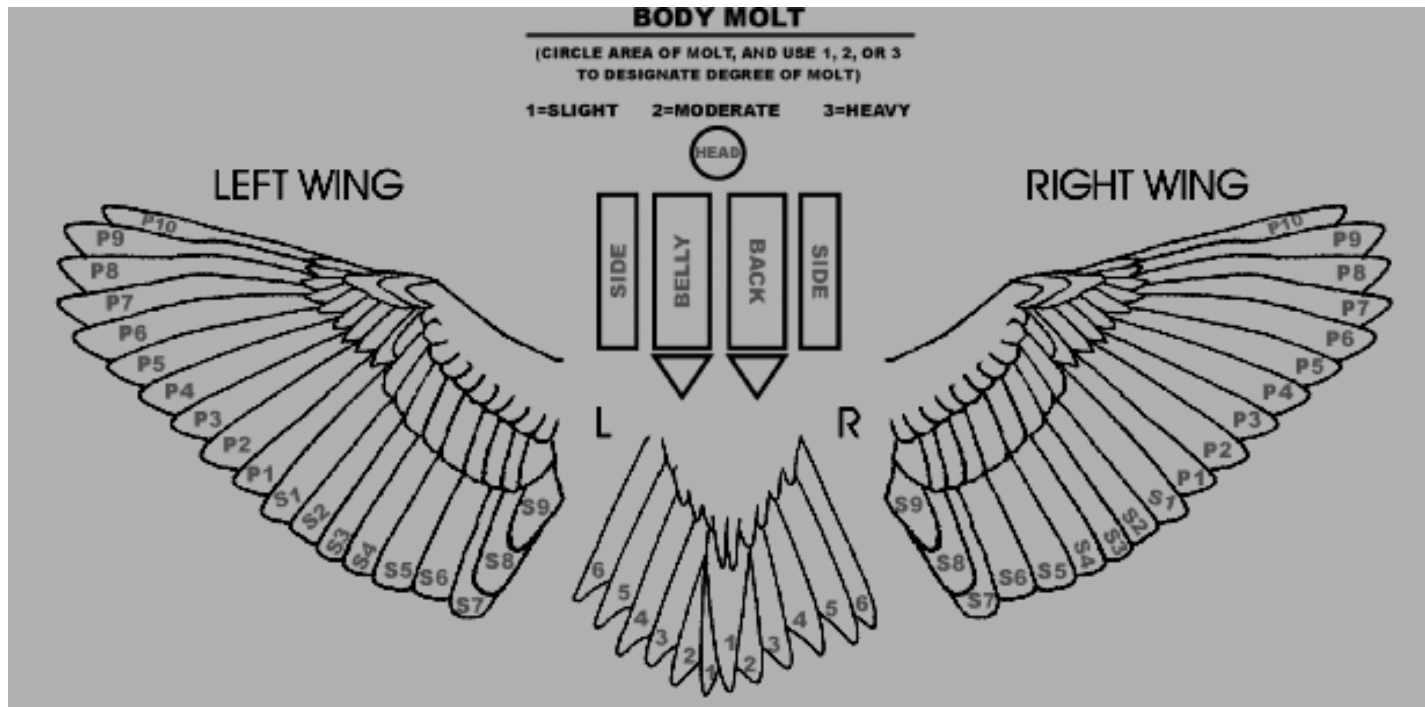
**Blood Samples:** G=genetics, S=slide

**STATUS:** NCP (new cap passive), NCT (new cap target), RCP (recap passive), RCT (recap target). NBN (nestling banded)

**SEX:** U=unknown, F=female, M=male

**CP:** 0=non-breeding, S=partial breeding, M=full breeding

**BP:** 0= none, 1=smooth, 2=vascularized and filled with fluid, 3 =wrinkled, 4=molting



DETAIL ALL MOLTS AND RETAINED FEATHERS ONTO DIAGRAM AND DETAIL IN NOTES

**COLORIMETER DATA FORM – 2004**

**SITE** (e.g. Gadsden Bend, AZ): \_\_\_\_\_

**DATE** (e.g. 11 June 2004): \_\_\_\_\_

**OBSERVER** (e.g. M.A. McLeod): \_\_\_\_\_

**FED BAND #** : \_\_\_\_\_

**CROWN MEASUREMENTS**

**PAGE** (e.g. P12): \_\_\_\_\_

**BACK MEASUREMENTS**

**PAGE** (e.g. P13): \_\_\_\_\_

	<b>L *</b>	<b>a *</b>	<b>b *</b>
<b>MAX</b>			
<b>MIN</b>			
<b>AVG</b>			
<b>SD</b>			

	<b>L *</b>	<b>a *</b>	<b>b *</b>
<b>MAX</b>			
<b>MIN</b>			
<b>AVG</b>			
<b>SD</b>			

NOTES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





## Willow Flycatcher Nest Record Form (2004)

Site name: \_\_\_\_\_ Patch Name: \_\_\_\_\_ Nest no.: \_\_\_\_\_

Nest Location: NAD: \_\_\_\_\_ Nest Height: \_\_\_\_\_ m (approximate)  
 Zone: \_\_\_\_\_ Nest Substrate: \_\_\_\_\_ (e.g. TASP=tamarisk, SAGO=Gooding willow, POFR=cottonwood, SAGE=Geyer willow, etc.)

UTM's: \_\_\_\_\_ Distance to water when nest found: \_\_\_\_\_ (m)  
 Easting: \_\_\_\_\_

Northing: \_\_\_\_\_ Depth of surface water (please circle how wet you got when nest was found): toes (<5cm), ankles (5-15 cm), calves (15-40 cm), knees (40-60 cm), thighs (60-80 cm), waist (100 cm), too deep to wade (>100 cm)

### PLEASE DO NOT FILL OUT ANYTHING BELOW

Bird 1: Color band combination: \_\_\_\_\_ Band Number: \_\_\_\_\_ Female

Bird 2: Color band combination: \_\_\_\_\_ Band Number: \_\_\_\_\_ Male

Willow Flycatcher			Willow Flycatcher			Cowbird			Cowbird		
Trans dates	B D	(T/F)	No.	Presumed	Confirmed	Trans dates	B D	(T/F)	No.	Complete? (T/F)	

Outcome (Record code & describe): \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<p><b>Outcome codes:</b>                  UN= unknown; FY= fledged young, with at least one young seen leaving or in the vicinity of nest; FP= fledged young, as determined by parents behaving as if dependent fledgling(s) nearby; FU= suspected fledging of at least one young; FC= fledged at least one host young with cowbird parasitism; FD= Nest partially depredated with confirmed fledging of at least one young; PO= predation observed; PE= probable predation, nest empty and intact; PD= probable predation, damage to nest structure; AB= nest abandoned prior to egg(s) being laid; DE= deserted with egg(s) or young; PA= parasitized, host attempted to raise cowbird young. No host young were fledged from the nest; WE= failure due to weather; AD= failure, entire clutch added/infertile; OT= failure due to other, or unknown, causes.</p>	<b>Mayfield Success</b>		
	(WIFL) Period	# Exposure days	Success
	Egg Laying		
	Incubation		
	Nestling		
	<p><b>Mayfield success codes:</b> S= successful; D= depredated; U= status unknown/nest occupied- fate unknown; M= mortality other than predation; A= abandoned with host egg(s) or young; Z= abandoned, no (zero) eggs laid.</p>		



## COWBIRD TRAPPING DATA FORM

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Start Time: \_\_\_\_\_

Location: \_\_\_\_\_

End Time: \_\_\_\_\_

### Trap #

	M	F	J	M	F	J	M	F	J	M	F	J	M	F	J	
<b>COWBIRDS</b>																
Newly Trapped																
Previous Decoys																
Removed																
Added																
Total left in Trap																
<b>Non-Target Species</b>																

**Comments**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## LCR Southwestern Willow Flycatcher Project - Vegetation Datasheet 2004

Date:		Obs:		Site:		Plot type:		ID#:		UTM:            E            N	
<b>Nest site only</b>		Substr.:		<b>All plot centers</b>			Dist water:            m		<b>Woody Ground Cover</b>		<b>Total Canopy</b>
Substr. DBH:            cm		Substr. Ht.:            m		Dist canopy gap:            m			Dist. Broadleaf:            m		N:	E:	N:
Nest Ht.:            m		or            %-            % X            m		Top Can.:            m			or            %-            % X            m		S:	W:	S:
<b>Species</b>		<b>TASP</b>	<b>SAGO</b>	<b>SAEX</b>	<b>POFR</b>	<b>SNAG</b>	<b>OTSP1:_____</b>	<b>OTSP2:_____</b>	<b>OTSP3:_____</b>		
<b>Shrub/Sapling Count In 5m Plot &lt; or = 8 cm dbh</b>		<1									
		1-2.5									
		2.6-5.5									
		5.6-8									
		Sum									
<b>Species</b>		<b>TASP</b>	<b>SAGO</b>	<b>SAEX</b>	<b>POFR</b>	<b>SNAG</b>	<b>OTSP1:_____</b>	<b>OTSP2:_____</b>	<b>OTSP3:_____</b>		
<b>Tree Count In 5m Plot &gt; 8 cm dbh</b>		8.1-10.5									
		10.5-15									
		Measured Trees >15 cm dbh									
<b>Species</b>		<b>TASP</b>	<b>SAGO</b>	<b>SAEX</b>	<b>POFR</b>	<b>SNAG</b>	<b>OTSP1:_____</b>	<b>OTSP2:_____</b>	<b>OTSP3:_____</b>		
<b>Tree Count in 5m to 11.3m Plot &gt;8 cm dbh</b>											

### NOTES

\* If, at ankle height or above, shrub/sapling/tree splits into multiple branches, count it as one stem and measure the biggest stem. If splits below ankle height, count all stems

\*\* If shrub/sapling/tree is not at least breast height, do not count

**Vertical Foliage Sampling (i.e. "Hits on the pole") : Microplot Vegetation**

CENTER PLOT						
Height (m)	Hits/Species					
	Tasp	Sago	Saex	Pofr	Snag	Otsp **
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Record number of decimeters with hits on pole (within 10 cm radius) per 1-m interval up to 8 m; above 8 m, estimate > or < 5 hits per meter interval.

**\*\* Other species (common name)** \_\_\_\_\_

**Vertical Foliage Sampling (i.e., "Hits on the pole") Data Form : Microplot Vegetation**

<b>Date:</b>		<b>Obs.:</b>		<b>Site:</b>		<b>Plot type:</b>		<b>ID#:</b>					
<b>Vertical Foliage Volume</b>													
<b>NORTH</b>	<b>Hits/Species</b>						<b>EAST</b>	<b>Hits/Species</b>					
<b>Height (m)</b>	<b>Tasp</b>	<b>Sago</b>	<b>Saex</b>	<b>Pofr</b>	<b>Snag</b>	<b>Otsp**</b>	<b>Height (m)</b>	<b>Tasp</b>	<b>Sago</b>	<b>Saex</b>	<b>Pofr</b>	<b>Snag</b>	<b>Otsp**</b>
1							1						
2							2						
3							3						
4							4						
5							5						
6							6						
7							7						
8							8						
9							9						
10							10						
11							11						
12							12						
13							13						
14							14						
15							15						
16							16						
17							17						
18							18						
19							19						
20							20						
21							21						
22							22						
23							23						
24							24						
25							25						

SIDE 2

SOUTH	Tasp	Sago	Saex	Pofr	Snag	Otsp **	WEST	Tasp	Sago	Saex	Pofr	Snag	Otsp **
1							1						
2							2						
3							3						
4							4						
5							5						
6							6						
7							7						
8							8						
9							9						
10							10						
11							11						
12							12						
13							13						
14							14						
15							15						
16							16						
17							17						
18							18						
19							19						
20							20						
21							21						
22							22						
23							23						
24							24						
25							25						

Record hits on pole (within 10 cm radius) per 0.1 m intervals up to 8 m; above 8 m, estimate > or < 5 hits per interval.

\*\* Other species (common name) \_\_\_\_\_

**SWFL Microclimate Data Sheet**

**LOCATION IDENTIFIER** \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

**UTM coordinates: Easting (x) 0** \_\_\_\_\_ **Northing (y)** \_\_\_\_\_  
**Dominant habitat within 10 m:** Cottonwood/Willow Tamarisk Mixed Native/Exotic Other (specify: \_\_\_\_\_ )  
**Estimated canopy cover at the sensor array:** Less than 25% 25%-75% More than 75%

**Temperature/Relative Humidity (T/RH)**

**Set-up:** Date (MM/DD/YY): \_\_\_\_\_ Time (military): \_\_\_\_\_ Crew member(s) \_\_\_\_\_  
 Logger 6-digit serial number (e.g., #630863): \_\_\_\_\_ Was red LED checked at set-up? Y or N  
 If NOT a nest site, what is the randomization sequence used? Sequence #: \_\_\_\_\_  
 Column 1: \_\_\_\_\_ Column 2: \_\_\_\_\_ Column 3: \_\_\_\_\_ Column 4: \_\_\_\_\_ Column 5: \_\_\_\_\_  
 If nest site, when was nest vacated (known or estimated; MM/DD/YY)? \_\_\_\_\_  
 Logger location: Tree Shrub Est. overall height of tree or shrub? \_\_\_\_\_ m Est. height of logger \_\_\_\_\_ m

**Take-down:** Date (MM/DD/YY): \_\_\_\_\_ Time (military): \_\_\_\_\_ Crew member(s): \_\_\_\_\_  
 Did any events occur that might have interfered with accuracy of data gathered by this logger (e.g., array blown out of tree, etc.)? No Yes If yes, explain: \_\_\_\_\_

**Soil Moisture (SM) – Seasonal Variation (SV)**

**Set-up:** Date (MM/DD/YY): \_\_\_\_\_ Time (military): \_\_\_\_\_ Crew member(s) \_\_\_\_\_  
 6-digit sensor serial number: \_\_\_\_\_ 6-digit logger serial number: \_\_\_\_\_  
 Soil sample taken (at set-up only)? Yes No If no, explain: \_\_\_\_\_

**Dates sensor function was checked** (approx. 10-day intervals): \_\_\_\_\_

**Take-down:** Date (MM/DD/YY): \_\_\_\_\_ Time (military): \_\_\_\_\_ Crew member(s): \_\_\_\_\_  
 Did any event (e.g., unexpected flood, dug up by animal, vandalism) occur that might have influenced the accuracy of the soil moisture data gathered by this sensor? Yes No If yes, explain: \_\_\_\_\_

Was site inundated/saturated at time when soil moisture array was taken down? Yes No  
 If yes, indicate depth of water: SAT <5 cm 5-15 cm 15-50 cm >50 cm

**Soil Moisture (SM) – Nest Site (NS), Within Territory (WT), and Non-use (NU)**

**Set-up:** Date (MM/DD/YY): \_\_\_\_\_ Time (military): \_\_\_\_\_ Crew member(s) \_\_\_\_\_  
 6-digit sensor serial number: \_\_\_\_\_ logger number: \_\_\_\_\_  
 Soil sample taken (at set-up only)? Yes No If no, explain: \_\_\_\_\_

**SM readings:** Plot center \_\_\_\_\_  
**North:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**East:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**South:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**West:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**Distance to saturated/inundated soil:** \_\_\_\_\_ m

**Take-down:** Date (MM/DD/YY): \_\_\_\_\_ Time (military): \_\_\_\_\_ Crew member(s): \_\_\_\_\_  
 6-digit sensor serial number: \_\_\_\_\_ logger number: \_\_\_\_\_

**SM readings:** Plot center \_\_\_\_\_  
**North:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**East:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**South:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**West:** 0.5 m \_\_\_\_\_ 1.0 m \_\_\_\_\_ 1.5 m \_\_\_\_\_ 2.0 m \_\_\_\_\_  
**Distance to saturated/inundated soil:** \_\_\_\_\_ m

**Location identifier format:** Study area code (MW, MM, PA, TM) – Location code (NS, WT, SU, SVR, SVD) – Nest number (for NS, WT, SU locations) or Seasonal Variation number; e.g., TM-SU-9A or MM-SVD-2

**SAT decision rule:** A 1-cm-deep trench created with a stick fills with water or unstable mud in less than one minute.