

**Appendix 1.** Supplementary summary statistics tables.

Table A1.1. Areas of migratory use identified for the Lower Colorado River Valley Population of Sandhill Cranes (*Antigone canadensis tabida*) during all five migrations between spring 2014 and spring 2016. \*Areas of Migratory Use located along the minor corridors.

Ranking	Area of Migratory Use	Sum of Days	Migrations	Spring		Sum of Days	Migrations	Fall		Both Seasons	
				Cranes (18 max)	Years (3 max)			Cranes (18 max)	Years (2 max)	Sum of Days	Ave Duration (days)
1	Kirch WMA	20.47	13	10	3	8.79	2	2	1	29.26	1.95
2	Pahranagat NWR	5.54	10	7	2	6.79	2	2	1	12.33	1.03
3	Mojave NP	3.1	8	7	3	0.42	2	2	2	3.51	0.35
4	Lake Mohave	2.79	7	6	3	0.58	2	2	1	3.38	0.38
5	Humboldt River	98.25	11	5	3	118.58	4	4	1	216.83	14.46
6	Ruby Lake NWR	33.08	7	5	3	6.79	1	1	1	39.87	4.98
7	Payette River	29.63	4	4	3	143.54	3	3	2	173.17	24.74
8	Greater Vegas Area	1.08	3	3	2	0.71	2	2	1	1.79	0.36
9	North LCRV	0.42	1	1	1	0	0	0	0	0.42	0.42
10	Cibola NWR	0	0	0	0	0.54	2	2	2	0.54	0.27
11	Lund NV	9.84	2	2	2	0	0	0	0	9.84	4.92
12	Snake River	2.05	2	2	2	0	0	0	0	2.05	1.02

13	Bear River*	0	0	0	0	58.5	2	2	1	58.5	29.25
14	DVIR	0.79	2	2	1	0	0	0	0	0.79	0.4
15	Green River*	0	0	0	0	25.42	1	1	1	25.42	25.42
	Meadow										
16	Valley Wash	7.42	1	1	2	0	0	0	0	7.42	7.42
16	Sevier River*	0	0	0	0	8	1	1	1	8	8
17	Joshua Tree	0	0	0	0	0.29	1	1	1	0.29	0.29
17	Truxton Wash	0.13	1	1	1	0	0	0	0	0.13	0.13
17	Burro Creek	0.42	1	1	1	0	0	0	0	0.42	0.42
17	Deep Creek	0.42	1	1	1	0	0	0	0	0.42	0.42

Table A1.2. Average Time Spent (Days) by Greater Sandhill Cranes (*Antigone canadensis tabida*) at Areas of Migratory Use (AMU) from Spring 2014–Spring 2016. \*NA indicates the site had no recorded visits

≥3 hours during that migration and were not included in averages.

Area of Migratory Use	Spring			Fall		
	$\bar{X}$	$\sigma_{\bar{x}}$	$n$	$\bar{X}$	$\sigma_{\bar{x}}$	$n$
Cibola NWR	NA	NA	NA	0.27	0.15	2
Joshua Tree	NA	NA	NA	0.29	0	1
North LCRV	0.42	0	1	NA	NA	NA
Mojave NP	0.39	0.02	8	0.21	0.08	2
Lake Mohave	0.4	0.05	7	0.29	0	2
Truxton Wash	0.13	0	1	NA	NA	NA
Greater Vegas Area	0.36	0.04	3	0.35	0.06	2
Pahrnagat NWR	0.55	0.15	10	3.4	2.98	2
Meadow Valley Wash	7.42	0	1	NA	NA	NA
Kirch WMA	1.57	0.41	13	2.96	2.83	2
Lund NV	4.92	4.5	2	NA	NA	NA
Sevier River	NA	NA	NA	0.33	0	1
Ruby Lake NWR	4.71	2.86	7	6.79	0	1
Green River	NA	NA	NA	25.42	0	1
Humboldt River	11.39	2.54	11	29.65	9.9	4
DVIR	0.4	0.02	2	NA	NA	NA
Bear River	NA	NA	NA	29.25	6.5	2
Snake River	1.02	0.6	2	NA	NA	NA
Payette River	7.41	4.26	4	47.85	8.1	3
Burro Creek	0.42	0	1	NA	NA	NA
Deep Creek	0.42	0	1	NA	NA	NA
All AMIs	3.27	0.68	74	14.74	3.89	25

Table A1.3. Migration routes used by satellite-tagged greater Sandhill Cranes (*Antigone canadensis tabida*) of the Lower Colorado River Valley Population.

Crane ID	Capture Date	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016
CIB001	1/1/2014	Major	Major	Unknown	Unknown	Major
CIB002	1/9/2014	Major	Major	Major	Major	Major
CIB003	1/9/2014	Major	Major	Major	Unknown	Major
CIB004	1/9/2014	Major	Unknown	Unknown	Unknown	Unknown
CIB005	1/9/2014	Major	Major	Major	Unknown	Major
CIB006	1/9/2014	Major	Major	<b>Minor</b>	<b>Minor</b>	Major
CIB007	1/14/2014	Major	Major	Unknown	Unknown	Unknown
CIB008	1/14/2014	Major	Major	Major	Major	Major
CIB009	1/14/2014	Major	Unknown	Unknown	Unknown	Unknown
CIB010	1/14/2014	Major	Unknown	Major	Unknown	Major
IV001	1/16/2014	Major	Major	Major	Major	Unknown
IV002	1/16/2014	Major	Major	Unknown	Unknown	Unknown
IV003	1/16/2014	Major	Major	Major	Major	Major
IV005	1/16/2014	Major	Major	Unknown	Major	Unknown
IV006	1/16/2014	Major	Major	Major	Major	Major
IV007	1/23/2014	Unknown	Major	Major	Major	Unknown
ID001	7/29/2014		Unknown	Unknown	Major	Major
ID005	7/30/2015				<b>Minor</b>	<b>Minor</b>

Table A1.4. Migration start and end dates, lengths (days), and distances (km) for our sample of satellite- tagged greater Sandhill Cranes (*Antigone canadensis tabida*) of the Lower Colorado Valley Population for fall migration.

Bird ID	Start	Arrival	Length (days)	Distance (km)	Fall
CIB001	8-Sep-14	14-Nov-14	67	1,310.06	2014
CIB002	27-Aug-14	14-Oct-14	48	858.51	2014
CIB003	31-Aug-14	3-Oct-14	33	988.64	2014
CIB004	29-Sep-14	3-Oct-14	4	990.43	2014
CIB005	1-Oct-14	2-Oct-14	1	780.5	2014
CIB006	30-Sep-14	3-Oct-14	3	987.81	2014
CIB008	31-Aug-14	14-Oct-14	44	804.83	2014
CIB010	30-Sep-14	2-Oct-14	2	774.04	2014
IV001	30-Sep-14	2-Oct-14	2	737.76	2014
IV003	29-Sep-14	2-Oct-14	3	681.22	2014
IV005	1-Oct-14	5-Oct-14	4	1,005.39	2014
IV006	30-Sep-14	3-Oct-14	3	917.33	2014
CIB002	11-Oct-15	23-Oct-15	12	786.85	2015
CIB006	16-Sep-15	8-Nov-15	53	1,544.36	2015
CIB008	8-Oct-15	10-Oct-15	2	851.97	2015
CIB010	3-Oct-15	7-Oct-15	4	842.87	2015
IV001	7-Sep-15	21-Sep-15	14	748.33	2015
IV003	2-Oct-15	3-Oct-15	1	721.67	2015
IV006	10-Sep-15	14-Oct-15	34	876.61	2015
IV007	17-Aug-15	24-Oct-15	68	1,433.50	2015
ID001	27-Sep-15	9-Nov-15	43	1,350.16	2015
ID005	3-Sep-15	23-Oct-15	50	1,541.01	2015
<b>Average</b>			22.5	978.81	
<b>Min</b>			1	681.22	
<b>Max</b>			68	1544.36	
<b>Median</b>	10/1/2014	10/29/2014	8	867.56	
<b>SD (sample)</b>			23.95	273.33	
<b>95% CI</b>					
<b>Upper</b>				864.06	
<b>95% CI</b>					
<b>Lower</b>				1093.03	

Table A1.5. Migration start and end dates, length of stay (days), and distances (km) for our sample of satellite-tagged greater Sandhill Cranes (*Antigone canadensis tabida*) of the Lower Colorado Valley Population for spring migration.

Bird ID	Start	Arrival	Length (days)	Distance (km)	Spring
CIB001	10-Mar-14	30-Mar-14	20	1,251.63	2014
CIB002	26-Feb-14	2-Mar-14	4	850.91	2014
CIB003	26-Feb-14	20-Mar-14	22	954.38	2014
CIB004	26-Feb-14	23-Mar-14	25	940.08	2014
CIB005	9-Mar-14	13-Mar-14	4	803.66	2014
CIB006	26-Feb-14	23-Mar-14	25	987.59	2014
CIB007	26-Feb-14	23-Mar-14	25	994.16	2014
CIB008	9-Mar-14	14-Mar-14	5	928.21	2014
CIB009	26-Feb-14	7-Mar-14	9	1,255.92	2014
CIB010	26-Feb-14	3-Mar-14	5	842.51	2014
IV001	23-Feb-14	26-Feb-14	3	664.84	2014
IV003	22-Feb-14	24-Feb-14	2	659.81	2014
IV005	23-Feb-14	26-Feb-14	3	1,009.45	2014
IV006	27-Feb-14	6-Mar-14	7	913.37	2014
CIB002	28-Feb-15	2-Mar-15	2	864.84	2015
CIB003	22-Feb-15	13-Mar-15	19	987.4	2015
CIB004	12-Feb-15	27-Mar-15	43	976.28	2015
CIB005	8-Mar-15	11-Mar-15	3	777.25	2015
CIB006	22-Feb-15	19-Mar-15	25	1,014.90	2015
CIB008	7-Mar-15	13-Mar-15	6	931.8	2015
CIB010	26-Feb-15	3-Mar-15	5	840.9	2015
IV001	25-Feb-15	6-Mar-15	9	716.63	2015
IV003	17-Feb-15	19-Feb-15	2	671.19	2015
IV006	26-Feb-15	11-Mar-15	13	847.6	2015
IV007	15-Feb-15	16-Mar-15	29	1,319.15	2015
CIB001	9-Feb-16	30-Mar-16	50	1340.66	2016
CIB002	29-Feb-16	3-Mar-16	3	879	2016
CIB003	2-Feb-16	12-Mar-16	39	945	2016
CIB004	25-Feb-16	30-Mar-16	34	971	2016
CIB005	8-Mar-15	11-Mar-15	3	794	2016
CIB006	25-Feb-16	20-Mar-16	24	1051	2016
CIB008	2-Mar-16	16-Mar-16	14	950	2016
CIB010	25-Feb-16	28-Feb-16	3	781	2016
ID001	1-Mar-16	20-Mar-16	19	1442.20	2016
ID005	29-Feb-16	5-Mar-16	5	1156	2016
IV001	23-Feb-16	29-Feb-16	6	731	2016
IV003	17-Feb-16	18-Feb-16	1	648	2016
IV006	1-Mar-16	5-Mar-16	4	853	2016
<b>Average</b>			13.68	935.43	
<b>Min</b>			1	648	
<b>Max</b>			50	1442.20	
<b>Median</b>	23-Feb-15	11-Mar-15	6.5	930.005	
<b>SD (sample)</b>			13.045	193.315	
<b>95% CI Upper</b>				873.96	
<b>95% CI Lower</b>				996.89	

