SAN ANDRES—

The San Andres survey was conducted on November 4^{th} & 5th, 2017. Two helicopters surveyed for a total of 20.83 hours. E. Rominger and P. Mathis flew with pilot E. Watters, and C. Ruhl flew with pilot Cam Stallings, and observer P. Morrow. J. Gahr and T. Rogers. A total of 190 bighorn sheep were observed. The ram:ewe:lamb ratio is 76:100:27. The total number of lambs observed (n=25) was a record for this survey. This is also the first year that every block (1-21) was flown.

The number of permits is to remain the same for 2018-2019 at 5. A capture effort was conducted in December 2017, the goal being to disease sample sheep as well as deploy GPS collars throughout the range.

Table 1. San Andres surveys, 2007-2017											
Year	Total	Ewes	Y. Ewes	Lambs	CI	CII	CIII	CIV	Total Rams	Type/Time	
Aug 07	72	36		12	4	4	12	4	24	A (7.6)	
Oct 08	73	31	5	9	6	8	11	3	28	A (12.6)	
Dec 09	69	32	3	12	4	3	10	5	22	G	
Oct 10	115	44	8	15	8	14	15	11	48	Est.	
Oct 12	102	56	2	11	1	10	7	15	33	A (15.8)	
Oct 15	174	81	4	12	7	20	19	30	76	A (17.9)	
			*1								
Oct 16	142	71	unk	22	5	12	11	20	48	A (15.9)	
Nov 17	190	93	1	25	10	15	17	29	71	A (20.8)	

BLOCK	2015	2016	2017	BLOCI	X 2015	2016	2017
1	73	29	51	1	1 2	5	6
2	18	24	11	1	2 DNF	DNF	0
3	10	4	3	1	3 0	0	0
4	17	25	38	1	4 4	0	8
5	5	3	26	1	5 4	0	2
	-	27		1	6 DNF	DNF	0
6	6		11	1	7 0	0	0
7	0	DNF	0	1	8 DNF	0	0
8	3	14	12	1	9 DNF	DNF	0
9	8	2	0	2	0 DNF	7	22
10	13	2	0	2	1 DNF	DNF	0

 Table 2. Sheep observed by block in the San Andres 2015-2017(DNF=did not fly)

Block	Sheep	Oryx	Time Start	Time End	Duration	CI	CII	CIII	CIV	YF	AF	Lamb	Other spp.
1	51	0	7:28	8:58	1:30	4	3	1	10	1	25	7	
2	11	0	8:58	10:31	1:33	0	0	2	2	0	6	1	
3	3	0	7:44	8:32	0:48	0	0	1	0	0	2	0	
4	38	0	11:22	12:57	1:35	3	5	2	6	0	20	2	
5	26	3	8:40	9:26	0:46	1	1	5	2	0	14	3	
6	11	0	9:27	10:24	0:57	0	1	1	2	0	4	3	
7	0	0	11:13	11:51	0:38	0	0	0	0	0	0	0	
8	12	3	11:52	13:01	1:09	0	2	0	1	0	5	4	
9	0	6	13:02	14:16	1:14	0	0	0	0	0	0	0	
10	0	1	15:00	15:58	0:58	0	0	0	0	0	0	0	4 javelina
11	6	1	6:41	8:13	1:32	0	1	0	1	0	3	1	
12	0	1	8:16	8:30	0:14	0	0	0	0	0	0	0	
13	0	4	7:03	8:30	1:27	0	0	0	0	0	0	0	barbary
14	8	1	16:01	16:48	0:47	0	0	2	1	0	4	1	
15	2	1	13:25	13:54	0:29	0	0	0	1	0	1	0	
16	0	0	15:17	15:31	0:14	0	0	0	0	0	0	0	
17	0	13	15:32	16:34	1:02	0	0	0	0	0	0	0	
18	0	4	16:35	17:25	0:50	0	0	0	0	0	0	0	10 elk
19	0	1	9:25	10:10	0:45	0	0	0	0	0	0	0	
20	22	3	9:26	10:58	1:32	2	2	3	3	0	9	3	
21	0	2	10:14	11:04	0:50	0	0	0	0	0	0	0	_
	190	44			20:50	10	15	17	29	1	93	25	

