

# Population Monitoring of Elephants

## Seals at Año Nuevo, 2014

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Population : Estimates of breeding elephant seal female and pup populations, Año Nuevo rookery, 2014. Number of pups born estimated as  $0.975 \times$  female number.

Area	Breeding females	Pups born	Pups weaned
Main point	1172	1143	1079
North point	416	406	387
Island	455	443	393
Total	2043	1992	1859

Weighing : Mean body mass in kg for elephant seals, Año Nuevo rookery, 2014. Sample size in parentheses. No correction for time since weaning date.

Age	F	M
ad	332.2 (11)	NA (0)
W	114.0 (146)	117.3 (153)

Female age distribution : Age and origin of breeding females whose tags were read, Año Nuevo rookery, 2014. The row *known* for Año Nuevo is the sum of the previous rows of known age. The following row is the number of observed females that had been tagged at Año Nuevo as adults, so age is not known. Age of most foreign-tagged females is not available to us.

Origin	Age	Main Point	North Point	Island	Total	
Año Nuevo	3	5	1	2	8	
	4	9	9	0	18	
	5	13	14	0	27	
	6	7	0	1	8	
	7	12	8	0	20	
	8	6	2	1	9	
	9	7	3	0	10	
	10	0	2	0	2	
	11	2	4	0	6	
	12	6	0	0	6	
	13	2	0	0	2	
	14	1	2	0	3	
	15	2	2	0	4	
	16	3	0	0	3	
	18	0	1	0	1	
	19	1	1	0	2	
	20	1	0	0	1	
	Año Nuevo	known	77	49	4	130
		unknown	34	13	1	48
San Miguel		5	1	2	8	
Point Reyes		3	2	1	6	
Gorda		3	2	0	5	
Piedras Blancas		15	3	2	20	
San Nicolas		1	0	0	1	
MM Center		0	0	0	0	

Newly tagged animals : Animals tagged for the first time in 2014 at the Año Nuevo colony. Number of animals tagged by age category and sex; YOY=pup/weaner (young-of-the-year) and Y=yearling. A total of 925 green tags plus 281 PIT tags were deployed on these animals. (One of the pups was tagged at Piedras Blancas.) An additional 15 tags were voided, and 13 were observed on YOY but do not appear in the database.

age cat	female	male	sex unknown
YOY	245	229	35
Y	9	1	0
juv	3	2	1
SA	0	6	0
ad	8	6	0
Total	265	244	36

Newly tagged animals : Animals tagged for the first time in 2014 at the Año Nuevo colony. Number of animals singly- and doubly-tagged, adults/juveniles. The category 2+ includes a small number with 3 tags (8 were given 3 or more green tags; 1 were given 3 or more PIT tags).

PIT tags	Green tags		
	0	1	2+
0	0	28	4
2+	1	3	0

Newly tagged animals : Animals tagged for the first time in 2014 at the Año Nuevo colony. Number of animals singly- and doubly-tagged, pups/weaners (YOY). The category 2+ includes a small number with 3 tags (8 were given 3 or more green tags; 1 were given 3 or more PIT tags).

PIT tags	Green tags	
	1	2+
0	131	116
1	9	243
2+	0	10

Re-tagged animals : Animals tagged in prior years (at any colony) then given a new tag in 2014 at the Año Nuevo colony. Number of animals tagged by age category and sex; YOY=pup/weaner (young-of-the-year) and Y=yearling. A total of 31 green tags plus 48 PIT tags were deployed on these animals.

age cat	female	male	sex unknown
YOY	0	0	0
Y	1	0	0
juv	2	0	0
SA	0	5	0
ad	27	4	0
Total	30	9	0

Re-tagged animals : Animals tagged in prior years (at any colony) then given a new tag in 2014 at the Año Nuevo colony. Number of animals singly- and doubly-tagged, adults/juveniles. The category 2+ includes a small number with 3 tags (12 were given 3 or more green tags; 2 were given 3 or more PIT tags).

PIT tags	Green tags	
	1	2+
0	1	16
1	0	1
2+	2	22

Sighting Effort : Number of individual sightings and individual animals identified each year since 2003

Year	Breeding		Non-breeding	
	Sightings	Animals	Sightings	Animals
2003	3094	186	22	1
2004	3779	201	144	32
2005	4926	261	1782	227
2006	4229	281	1036	262
2007	2693	183	572	124
2008	1924	205	1273	283
2009	3072	215	835	207
2010	4931	241	2065	348
2011	7239	264	2190	348
2012	7254	302	2448	375
2013	9230	337	3615	395
2014	8236	357	2102	369