

Population Monitoring of Elephants

Seals at Año Nuevo, 2004

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Population : Estimates of breeding elephant seal female and pup populations, Año Nuevo rookery, 2004. Number of pups born estimated as $0.975 \times$ female number.

Area	Breeding females	Pups born	Pups weaned
Main point	1657	1615	808
North point	347	338	212
Island	564	550	209
Total	2567	2503	1229

Weighing : Mean body mass in kg for elephant seals, Año Nuevo rookery, 2004. Sample size in parentheses. No correction for time since weaning date.

Age	F	M
P	129.7 (5)	117.6 (2)
W	112.6 (92)	109.8 (69)
Y	170.5 (1)	152.5 (2)

Female age distribution : Age and origin of breeding females whose tags were read, Año Nuevo rookery, 2004. 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	2	1	1	4	
	4	14	11	0	25	
	5	11	5	0	16	
	6	11	2	1	14	
	7	2	3	0	5	
	8	13	3	0	16	
	9	11	2	0	13	
	10	4	1	0	5	
	11	1	1	0	2	
	12	2	2	0	4	
	13	5	0	1	6	
	14	2	1	0	3	
	15	5	2	0	7	
	16	0	2	0	2	
	17	2	0	0	2	
	18	1	0	0	1	
	19	1	0	0	1	
	20	1	0	0	1	
	Año Nuevo	known	88	36	3	127
		unknown	46	11	3	60
San Miguel		19	5	8	32	
Point Reyes		9	2	2	13	
Gorda		3	2	1	6	
Piedras Blancas		26	2	1	29	
San Nicolas		3	1	2	6	
MM Center		1	0	0	1	

Newly tagged animals : Animals tagged for the first time in 2004 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 535 green tags plus 0 PIT tags were deployed on these animals. An additional 4 tags were voided, and 0 were observed on YOY but do not appear in the database.

age cat	female	male	sex unknown
YOY	176	114	22
Y	3	3	1
juv	2	1	1
SA	0	0	0
ad	10	0	0
Total	191	118	24

Newly tagged animals : Animals tagged for the first time in 2004 at the Año Nuevo colony. Number of animals singly- and doubly-tagged, adults/juveniles. The category 2+ includes a small number with 3 tags (57 were given 3 or more green tags; 0 were given 3 or more PIT tags).

PIT tags	Green tags		
	0	1	2+
0	1	14	5
2+	0	1	0

Newly tagged animals : Animals tagged for the first time in 2004 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 (57 were given 3 or more green tags; 0 were given 3 or more PIT tags).

PIT tags	Green tags		
	0	1	2+
0	27	108	176
2+	0	0	1

Re-tagged animals : Animals tagged in prior years (at any colony) then given a new tag in 2004 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 12 green tags plus 0 PIT tags were deployed on these animals.

age cat	female	male	sex unknown
YOY	0	0	0
Y	0	0	0
juv	0	0	0
SA	0	0	0
ad	0	0	0
W	1	0	0
Total	1	0	0

Re-tagged animals : Animals tagged in prior years (at any colony) then given a new tag in 2004 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; 0 were given 3 or more PIT tags).

PIT tags	Green tags
	2+
0	1
2+	1

Sighting Effort : Number of individual sightings and individual animals identified each year since 1995

Year	Breeding		Non-breeding	
	Sightings	Animals	Sightings	Animals
1995	5391	175	6	0
1996	12468	385	44	14
1997	3139	294	401	163
1998	1632	173	1288	345
1999	751	107	11	0
2000	1667	149	48	0
2001	2764	204	53	13
2002	2509	194	100	12
2003	3094	186	22	1
2004	3779	201	144	32