

Population Monitoring of Elephants

Seals at Año Nuevo, 2006

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Population : Estimates of breeding elephant seal female and pup populations, Año Nuevo rookery, 2006. Number of pups born estimated as $0.975 \times$ female number.

| Area | Breeding females | Pups born | Pups weaned |
|-------------|------------------|-----------|-------------|
| Main point | 1838 | 1792 | 1768 |
| North point | 275 | 268 | 221 |
| Island | 532 | 519 | 413 |
| Total | 2645 | 2579 | 2402 |

Weighing : Mean body mass in kg for elephant seals, Año Nuevo rookery, 2006. Sample size in parentheses. No correction for time since weaning date.

| Age | F | M |
|-----|------------|------------|
| W | 107.3 (61) | 112.7 (63) |

Female age distribution : Age and origin of breeding females whose tags were read, Año Nuevo rookery, 2006. 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 | 3 | 1 | 0 | 4 | |
| | 4 | 26 | 0 | 0 | 26 | |
| | 5 | 7 | 2 | 0 | 9 | |
| | 6 | 9 | 11 | 0 | 20 | |
| | 7 | 9 | 0 | 1 | 10 | |
| | 8 | 10 | 0 | 0 | 10 | |
| | 9 | 5 | 1 | 0 | 6 | |
| | 10 | 8 | 2 | 1 | 11 | |
| | 11 | 11 | 3 | 0 | 14 | |
| | 12 | 3 | 0 | 1 | 4 | |
| | 13 | 1 | 1 | 0 | 2 | |
| | 14 | 1 | 0 | 0 | 1 | |
| | 15 | 1 | 0 | 0 | 1 | |
| | 16 | 1 | 1 | 0 | 2 | |
| | 17 | 4 | 0 | 0 | 4 | |
| | 18 | 0 | 1 | 0 | 1 | |
| | Año Nuevo | known | 99 | 23 | 3 | 125 |
| | | unknown | 57 | 19 | 4 | 80 |
| San Miguel | | 14 | 0 | 1 | 15 | |
| Point Reyes | | 6 | 1 | 0 | 7 | |
| Gorda | | 4 | 1 | 1 | 6 | |
| Piedras Blancas | | 28 | 2 | 2 | 32 | |
| San Nicolas | | 1 | 0 | 1 | 2 | |
| MM Center | | 0 | 0 | 0 | 0 | |

Newly tagged animals : Animals tagged for the first time in 2006 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 637 green tags plus 0 PIT tags were deployed on these animals. An additional 18 tags were voided, and 2 were observed on YOY but do not appear in the database.

| age cat | female | male | sex unknown |
|---------|--------|------|-------------|
| YOY | 271 | 139 | 30 |
| Y | 9 | 0 | 0 |
| juv | 1 | 0 | 0 |
| SA | 0 | 0 | 0 |
| ad | 5 | 6 | 0 |
| Total | 286 | 145 | 30 |

Newly tagged animals : Animals tagged for the first time in 2006 at the Año Nuevo colony. Number of animals singly- and doubly-tagged, adults/juveniles. The category 2+ includes a small number with 3 tags (5 were given 3 or more green tags; 0 were given 3 or more PIT tags).

| PIT tags | Green tags | |
|----------|------------|----|
| | 1 | 2+ |
| 0 | 15 | 6 |

Newly tagged animals : Animals tagged for the first time in 2006 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 (5 were given 3 or more green tags; 0 were given 3 or more PIT tags).

| PIT tags | Green tags | |
|----------|------------|-----|
| | 1 | 2+ |
| 0 | 266 | 165 |
| 1 | 0 | 1 |
| 2+ | 0 | 8 |

Re-tagged animals : Animals tagged in prior years (at any colony) then given a new tag in 2006 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 32 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 | 9 | 0 | 0 |
| Total | 9 | 0 | 0 |

Re-tagged animals : Animals tagged in prior years (at any colony) then given a new tag in 2006 at the Año Nuevo colony. Number of animals singly- and doubly-tagged, adults/juveniles. The category 2+ includes a small number with 3 tags (16 were given 3 or more green tags; 0 were given 3 or more PIT tags).

| PIT tags | Green tags |
|----------|------------|
| 0 | 2+ |
| 0 | 9 |

Sighting Effort : Number of individual sightings and individual animals identified each year since 1997

| Year | Breeding | | Non-breeding | |
|------|-----------|---------|--------------|---------|
| | Sightings | Animals | Sightings | Animals |
| 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 |
| 2005 | 4926 | 261 | 1782 | 227 |
| 2006 | 4229 | 281 | 1036 | 262 |