

2025 Elephant Seal Breeding Season Update January 10, 2025



News this week:

- As of 1/10, there are 7 cows and 3 pups in front of KPVC! The first pup was observed by docents on the morning of 1/8.
- Due to the birth of the pup, Drakes Beach parking lot will be closed from 4pm 10am everyday.
- The total count of elephant seals at Point Reyes has been above average so far.
- Drakes Beach, the Fish Dock, the beach at the Historic Lifeboat Station, and the southern end of South Beach are closed.



Top Left: A pregnant cow and the Alpha male of KPVC, 'V1'. Seals flip sand onto themselves to thermoregulate.

Bottom Left: A cow and pup on Drakes Beach. Cows nurse their pup for approximately 28 days.

Top Right: The elephant seal colony further down on Drakes Beach continues to increase in numbers!

Bottom Right: Last year, a satellite tagged cow from Año Nuevo gave birth to a pup at Drakes Beach, who was then flipper tagged. This pup (now a yearling) was observed by biologists at the Elephant seal overlook. This seal survived its first journey out at sea!





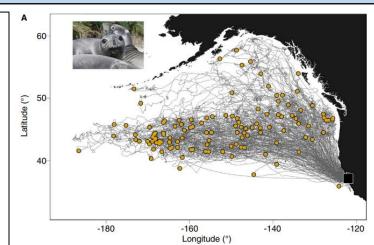
Photos by A.Goldston. NMFS Permit No. 21425



It's time to go!

Elephant seals are quite the punctual marine mammal. Pregnant female elephant seals undertake an approximately 240-day, 6000mile migration from their foraging grounds in the open ocean to their breeding grounds. Then, within around 5 days, they give birth to a pup. Elephant seals do not eat on their migration journey or when they are on the beach, so it is key that they have enough energy reserves to last the next several months. Researchers at UC Santa Cruz used satellite tracking data from cows to determine what factors control their arrival to land. They hypothesized that seals with more energy stores (fatter seals) may return earlier but instead, they found that seals begin their migration journey based solely on where they are and how long it will take for them to get back. The seals seem to have innate 'map' and 'calendar' information--they found that seals that were farther away from their breeding grounds initiated their return to land at an earlier date. It is still unknown what sensory cues the seals use to keep track of their location and direction.

Works cited: Beltran, Roxanne S. et al. **Elephant seals time their long-distance migrations using a map sense**. *Current Biology*, Volume 32, Issue 4, R156 - R157



Above: Satellite tracking data of adult female elephant seals. Yellow points are the turnaround locations for each elephant seal. The grey lines are the full migration tracks.

Below: An elephant seal cow and her pup.



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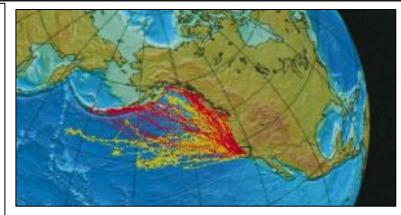


Foraging strategies

For the short stints of time that they are on land, elephant seals group together and establish social hierarchies. But when they are out in the ocean, they are solitary animals, foraging alone. Male and female elephant seals are very different in size and weight and thus have very different energy requirements. Using satellite-tracking data of seals, researchers found that male and female elephant seals have different foraging strategies to meet their different energy requirements.

Males have a higher energy requirement, as the larger males have higher social rank and reproductive success. Researchers found that males primarily migrate rapidly and directly to their foraging locations along the continental margin, ranging from coastal Oregon to the Aleutian islands. Then, they spend most of the time feeding on dense patches of highly nutritious benthic prey, such as elasmobranchs (sharks and rays) and cyclostomes (lamprey). However, by foraging closer to the coast, male elephant seals have greater exposure to their primary predators, the white shark and killer whale.

Female seals on the other hand, have more variable foraging locations, heading north or west, and remaining in open ocean over deep water. Females appeared to stop and forage opportunistically at many different sites over a larger area. Their movements and diving patterns suggest that they forage on pelagic prey such as cephalopods and lanternfish that migrate up and down in the water column. Because females have a lower energy requirement than males, they can utilize a feeding method that relies on efficiently exploiting smaller food patches. Predation risk is also much lower in the open ocean as white sharks and orcas tend to stick closer to the coast.



Above: Satellite tracks of elephant seals males (red) and females (yellow) during the spring and fall migrations from Ano Nuevo.

Below: Elephant seal cows on the beach.

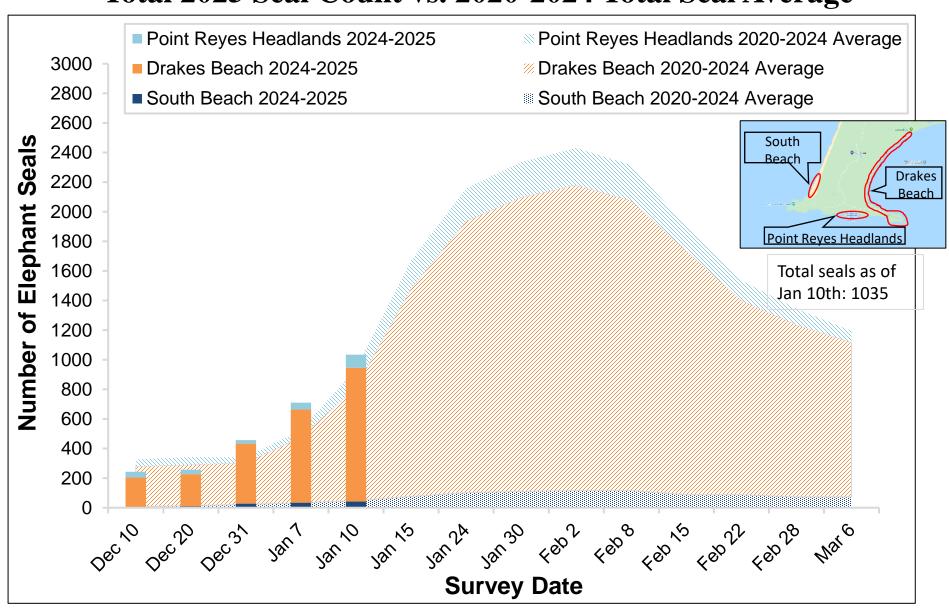


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Works Cited: Le Boeuf, Burney & Crocker, Daniel & Costa, Daniel & Blackwell, Susanna & Webb, P.M. & Houser, Dorian. (2000). Foraging Ecology of Northern Elephant Seals. *Ecological Monographs*. 70. 353-382. 10.2307/2657207.

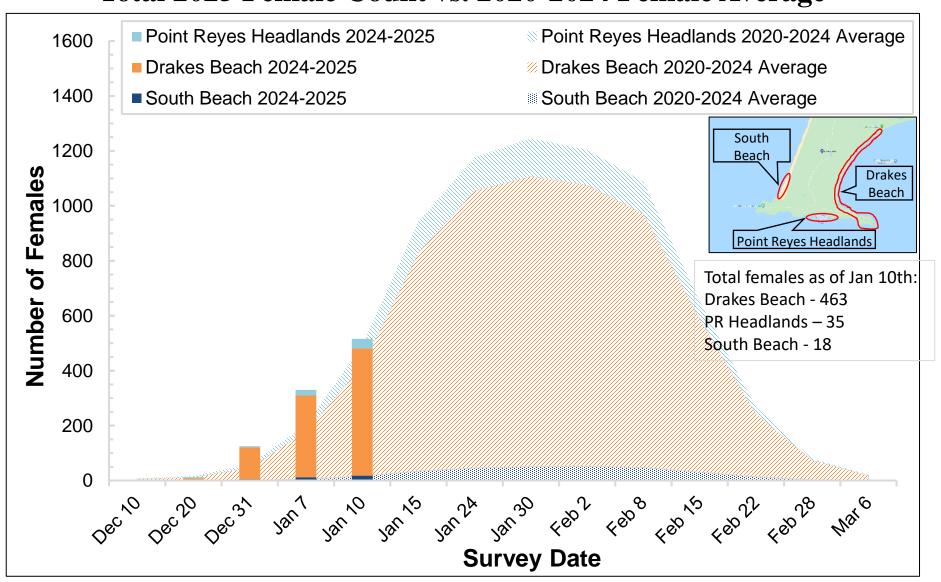
Northern Elephant Seals at Point Reyes National Seashore

Total 2025 Seal Count vs. 2020-2024 Total Seal Average



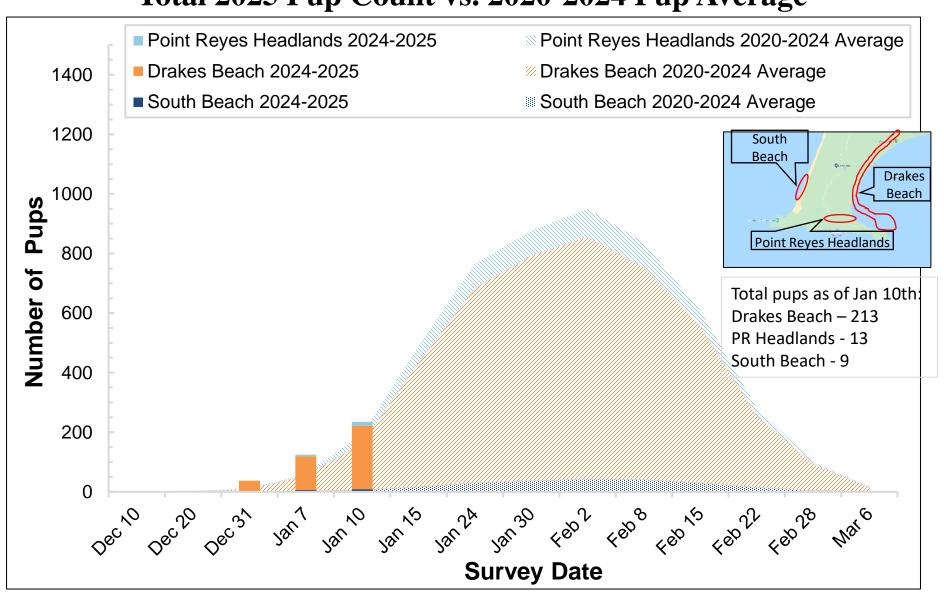
Northern Elephant Seals at Point Reyes National Seashore

Total 2025 Female Count vs. 2020-2024 Female Average



Northern Elephant Seals at Point Reyes National Seashore

Total 2025 Pup Count vs. 2020-2024 Pup Average





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