

National Park Service



2024 Elephant Seal Breeding Season Update February 23, 2024

News this week:

- Weanlings are finding their way into different areas around Ken Patrick Visitor Center. Notify staff of any weanlings outside the beach.
- There are a total of 645 weanlings in the park and 61 weanlings at KPVC as of 2/22/24.
- This year, biologists are seeing more elephant seals and pups by Horseshoe Pond, northeast of KPVC.
- Total elephant seal, cow, pup, and weanling counts remain below the 5-year average.



Above: The cow count peaked at 1165 cows on 1/30. This week's count was 370. Nearly 70% of the cows at the park have returned to the open ocean to forage. They will be back on the beaches in April to molt.

Center: Weanlings at the Lifeboat Station have been heard and seen under the building! This is a normal occurrence.

Top Left: Weanlings at Ken Patrick Visitor Center are exploring new areas. This tagged female has been laying in the staff parking area.

Bottom Left: Biologists continue to tag weaned pups at different colonies in the park. Tags are applied in the inter-digital webbing of the hind flipper.

Photos by A.Goldston. NMFS Permit No. 21425



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May the best mate win!

The dominance hierarchy and territories of male elephant seals are established on the beaches even before females arrive on the beach in December. Throughout the breeding season, males defend their growing harems from competing males. This is so that during estrus, the dominant male can mate with as many cows in his harem as possible. Although dominant males make up most of the breeding, subordinate males employ some strategies to try their luck and mate with cows.

Sneaker male strategy – a strategy used by young, subordinate males – is to lurk on the edge of the harem and sneak in to mate with cows while the dominant male is not paying attention. Unfortunately for the sneaker males, this strategy is not usually successful as the cows are not receptive and often vocalize, alerting the alpha, who swiftly scares off the subordinates.

Skulker male strategy – a strategy where a subadult male encroaches the harem to mate at night, under the cover of darkness. They'll leave and skulk to different harems.



Above: An elephant seal bull mating with a cow. A weanling rushes to get out of the way.

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El Niño and Elephant seals

The El Niño-Southern Oscillation (ENSO) cycle is a periodic climate pattern that occurs in the eastern tropical Pacific Ocean. El Niño events are not predictable but occur irregularly at intervals of about 2 to 7 years. During El Niño, warm water is pushed toward the west coast of the Americas, causing wetter conditions on the Gulf coast. This warm water also weakens or stops the upwelling of cold, nutrient rich water that phytoplankton rely on for photosynthesis. Decreased phytoplankton and warmer water can alter the environmental landscape and trophic chains of marine ecosystems, which affects marine predators like elephant seals. Researchers at Sonoma State and UC Santa Cruz compared foraging behavior of cows during the 1997-98 El Niño, one of the strongest of the 20th century, to other years, using time-depth recorders and satellite tracks. They found that cows spent less time in prey patches and more time traveling between prey patches. They also found that mass gain was the lowest measured since 1983. Females also returned with lower average fat stores than in other years. Natality during the 1999 breeding season was 87%, the lowest ever recorded at the colony, compared to the average of 96.5%.

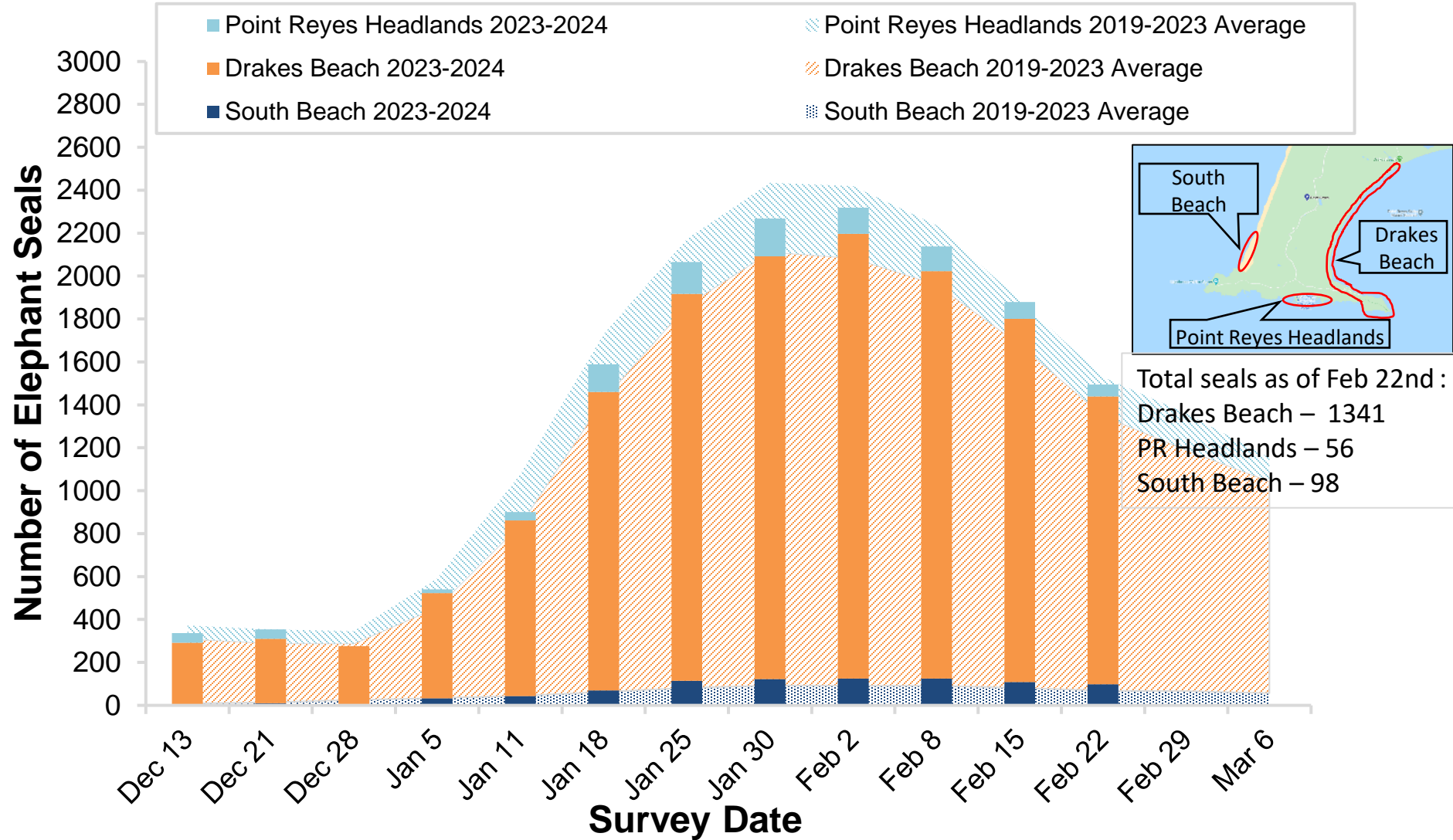


Above: An elephant seal cow, swimming.

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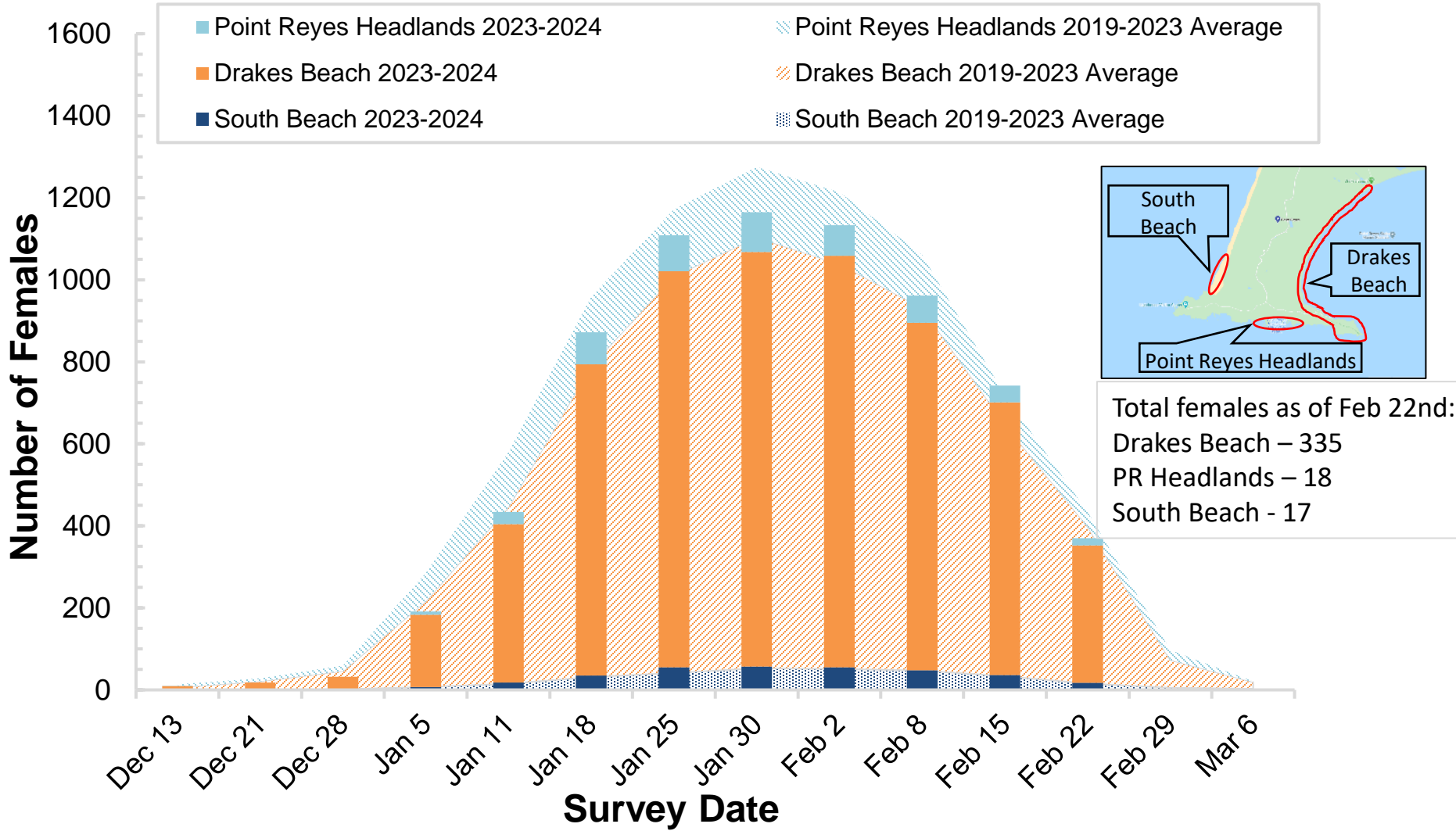
Northern Elephant Seals at Point Reyes National Seashore

Total 2024 Seal Count vs. 2019-2023 Total Seal Average



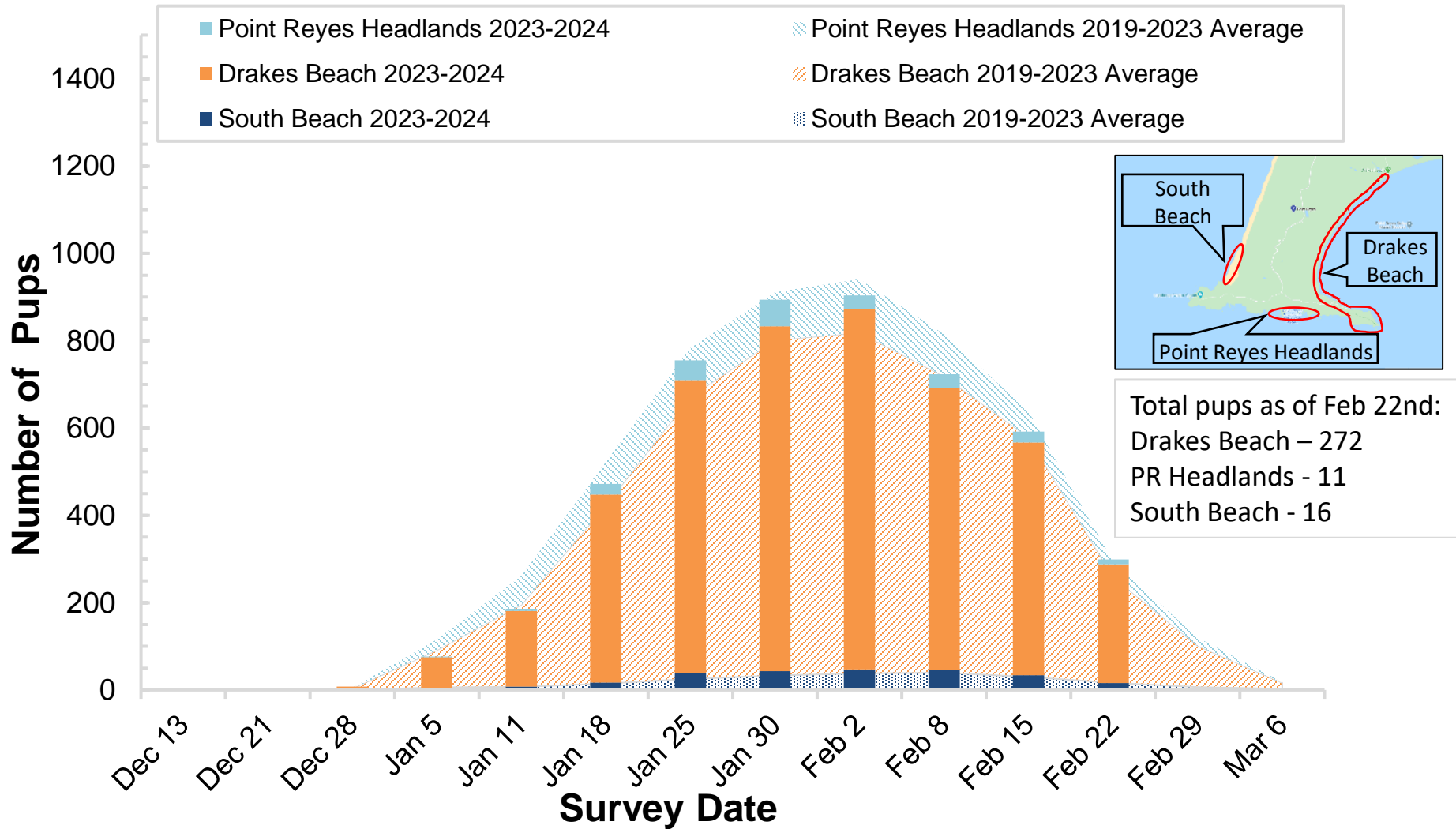
Northern Elephant Seals at Point Reyes National Seashore

Total 2024 Female Count vs. 2019-2023 Female Average



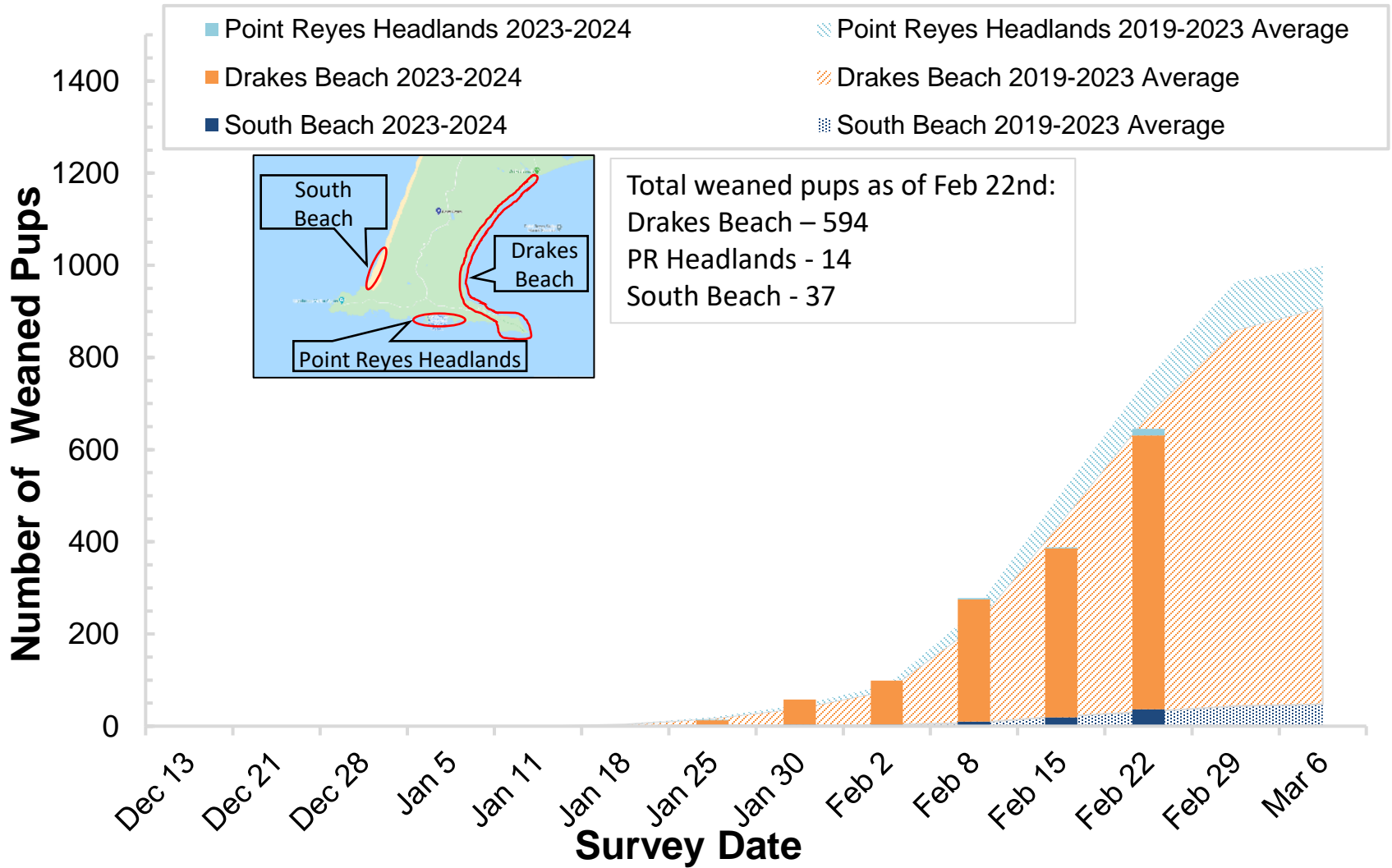
Northern Elephant Seals at Point Reyes National Seashore

Total 2024 Pup Count vs. 2019-2023 Pup Average



Northern Elephant Seals at Point Reyes National Seashore

Total 2024 Weaned Pup Count vs. 2019-2023 Weaned Pup Average



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