

Steller Sea Lions in Alaska: When Do they Wean and Are they Nutritionally Stressed?

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Behavioral observations of lactating Steller sea lions (*Eumetopias jubatus*) and their offspring were recorded at 4 haulout sites in Alaska to determine whether sea lions wean during winter when 6-8 months old, as has been commonly thought. We also sought to test whether sea lions using sites in the Gulf of Alaska (the declining endangered population) made longer foraging trips than sea lions in southeast Alaska (where the population appears larger and healthier). Longer foraging trips are commonly thought to be an indicator of nutritional stress. Eight sets of behavioral observations were made using focal and scan sampling techniques at haulouts over 4

years (1995-1998) and 3 seasons (winter, spring and summer). Counter to expectations, we found no significant differences in the amount of time that lactating Steller sea lions from either haulout population spent at sea or on shore. This suggests that sea lions did not have more difficulty capturing prey from winter through summer in the area of decline compared to the area of population growth. However, the types and relative abundances of prey consumed in each region differed. Steller sea lions in both regions made longer foraging trips in winter than they did in spring and summer. These changes in foraging patterns between seasons were consistent among all years and sites. The proportion of time immature Steller sea lions suckled declined through the spring to early summer suggesting that sea lions began supplementing their milk diet with solid food in the spring. We did not observe any sea lions weaning during the winter. Rather, most sea lions appeared to wean shortly before they turned 1 year old, although some suckled for a second year until the start of the following breeding season.

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