Female Steller sea lions tend to breed near their birthplace

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Steller sea lions. Credit: David B. Ledig/USFWS

Female Steller sea lions tend to breed at or near the rookery where they were born, according to a study published June 7, 2017 in the open-access journal *PLOS ONE* by Kelly Hastings from the Alaska

Department of Fish and Game, USA, and colleagues.

Understanding the patterns of dispersal for an animal species is critical for measuring changes in the population, which helps with conservation efforts. Previous studies have shown that Steller sea lion (Eumetopias jubatus) males tend to disperse more frequently than the females, however, little is known about the movements of breeding females.

The authors of the present study monitored 369 Steller sea lion females that had been marked as pups in the rookeries where they were born in southeastern Alaska, gathering observation and recapture data between 2001 and 2015 to assess how frequently breeding females switched rookery.

The researchers found that most female sea lions tended to breed at the rookeries where they were born, with fewer than 3 percent switching rookeries between years. When female sea lions did move to another rookery before breeding, they tended to select rookeries that were nearby and had a higher population of other sea lions.

Female sea lions' tendency to breed in the location where they were born could suggest that familiarity with neighboring females and knowledge of the topography of the site (for both giving birth to pups and foraging) could be crucial components of their reproduction and thus, the conservation of their species.

More information: Hastings KK, Jemison LA, Pendleton GW, Raum-Suryan KL, Pitcher KW (2017) Natal and breeding philopatry of female Steller sea lions in southeastern Alaska. *PLoS ONE* 12(6): e0176840. doi.org/10.1371/journal.pone.0176840