POSTER Session: Steller Sea Lion Biology and Ecology Population Status and Dispersal

Preliminary Report on Steller Sea Lion Brand-Resighting Results in Southeast Alaska

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The Alaska Department of Fish and Game (ADFG) began branding Steller sea lions, *Eumetopias jubatus*, in 1994 to permanently mark animals, allowing recognition of individuals throughout their lives. Using mark-recapture models, resighting individuals over time will allow estimates of life history parameters such as survival, recruitment, and dispersal. In Southeast Alaska (SEA), 1,615 pups were branded on their natal rookeries in June 1994, 1995, 2001, and 2002. Ninety-four older pups and juveniles were branded in 2001-2002. In 1999, ADFG began dedicated brand-resighting cruises in SEA. Rookeries and haulouts were approached by skiff; observers used binoculars (8-14X) to conduct counts and read brands. Number of animals observed, brand number and quality, brand verification check, and status (e.g., female with pup) were recorded. In 2000, resight effort increased to 3 weeks and expanded geographically, including northern British Columbia and all haulouts and rookeries in SEA. Digital photography (Nikon D1 digital camera with 70-300mm lens) was adopted to document and confirm brand observations; when possible, every branded animal was photographed. The 2002 resight cruise was lengthened to allow greater coverage of British Columbia and allow multiple visits to larger sites. In June 2002, we visited 37 sites, observed approximately 10,700 SSLs, and sighted 310 unique brands, accounting for 23% of the 1,373 animals branded through 2001. A 10-day cruise in August 2002 allowed us to determine whether new animals would be sighted during a different time of year. We observed 90 unique brands; 33% had not been seen during the June 2002 cruise. In August, we resighted 39% of 318 pups branded at their natal rookery during June 2002. Photographs and standardized methods are essential to obtaining reliable brand-resightings. With four years of consecutive brand-resight data, we are in the early stages of collecting large amounts of life history data of known-age individuals.

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Abstracts





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