

Figure 1 Location of observations from opportunistic acoustic data collection for 2002 through 2005.



Figure 2 The distribution of pollock aggregations at the three spatial and temporal resolutions observed in the spatial cross-correlogram analyses with a diel pattern at the finest resolution. At the lowest resolution and highest extent pollock distribution is shown to be consistent with the three traditional fishing areas on the eastern Bering Sea shelf.



Figure 3 Maps of the posterior median pollock biomass (normal score of tons) by year at the 100 km² model spatial resolution. Crossed circles (⊕) are the posterior median centroids for each resolution and year.



Figure 4 Maps of posterior median fishing exploitation rates by year at the 100 km² model spatial resolution. Crossed circles (\oplus) are the posterior median centroids of fishing exploitation for each resolution and year.

Table 1 Posterior median of mean fishing exploitation rates by year and combined for inside $(\tilde{F}_{90y}^{inside})$ and outside $(\tilde{F}_{90y}^{outside})$ of Steller sea lion critical habitat (SSLCH) with lower and upper 95% credible intervals (CI) generated by MCMC. Mean fishing exploitation were generated for each MCMC draw separately for inside and outside SSLCH as the sum of catch on day 90 divided by the sum of biomass for each year and for all four years.

	$\frac{\widetilde{\mathbf{r}}}{\mathbf{r}}$ inside			$\frac{\widetilde{\mathbf{r}}}{\mathbf{r}}$ outside		
Year	F_{90y}	Lower CI	Upper CI	F_{90y}	Lower CI	Upper CI
2002	0.0763	0.0757	0.0769	0.0609	0.0605	0.0614
2003	0.0903	0.0896	0.0910	0.0339	0.0337	0.0342
2004	0.1456	0.1445	0.1468	0.0394	0.0391	0.0397
2005	0.0745	0.0740	0.0751	0.0332	0.0330	0.0335
All Years	0.0900	0.0893	0.0907	0.0365	0.0362	0.0367



Figure 5 Effects of A) sea surface temperature, B) bottom depth, and C) distance to ice edge on the normalized backscatter (s_A) from the optimum projection model (OPM). Shaded areas are 2 standard errors around estimated effects.



Figure 6 Projections of EBS pollock preferred habitat on January 20 for A) 2002, B) 2003, C) 2004, D) 2005, and E) 2006. The 1 °C isotherm is indicated in the solid black line, the 100 m isobath by a dotted black line.



Figure 7 Prediction error from projections of EBS pollock preferred habitat on January 20 for A) 2002, B) 2003, C) 2004, D) 2005, and E) 2006. The 1 °C isotherm is indicated in the solid black line, the 100 m isobath by a dotted black line.