between all groups except yearlings and subadults (1997: p=0.114, 1998: p=0.060). Yearlings began the molting process first, followed by subadults, adult females, and adult males. The dates of the active molt were similar between years for subadults (p=0.649) and adult females (p=0.173), differed slightly for yearlings (p=0.032), and substantially for adult males (p<0.0001). The number of seals hauled out during the molt could be predicted by the proportion of seals in different molt stages. This relationship was most precise for yearlings, intermediate for subadults and adult males, and least precise for adult females. Generally, the number of seals hauled out was positively related to the proportion of seals in the active molt and negatively related to the proportion of seals in the pre-molt and post-molt stages. In Alaska, harbor seal population trends and abundance are estimated through aerial surveys flown during mid to late August when the largest numbers of seals are assumed to be ashore during the molting period. However, the precise timing of molting is not known for most areas. Knowledge of the timing and magnitude of differences in the molting period among sex/age classes should be considered in determining optimal population survey periods.

## MOLTING PHENOLOGY OF HARBOR SEALS ON TUGIDAK ISLAND, ALASKA

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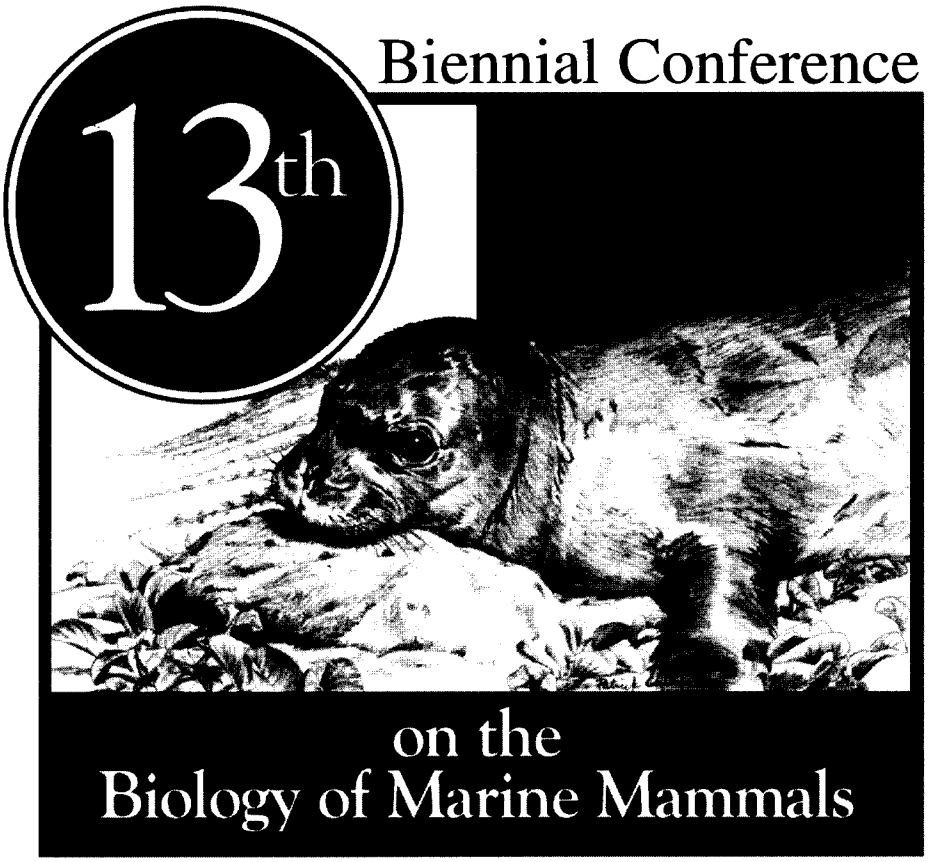
We documented the progression and timing of the annual molt of harbor seals by sex and age class during 1997 and 1998 on Tugidak Island in the Gulf of Alaska. Sex/age classes included yearlings, subadults, adult females, and adult males. We broadly characterized molt stages as pre-molt, active molt, and post-molt. In both years, all sex/age classes differed (p<0.0001) from each other in the timing of the pre-molt and active molt. Timing of the post-molt in both years differed (p<0.0001)

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# ABSTRACTS

## Wailea, Maui, Hawaii