

DETERMINING RISK FACTORS ASSOCIATED WITH MORTALITY OF STRANDED HARBOR SEALS (*Phoca vitulina*) DURING REHABILITATION

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ABSTRACT

Pacific harbor seals, *Phoca vitulina richardsi*, are the most common marine mammal found in the inland waters of Washington State. In populated areas, stranded harbor seal pups are collected and admitted to rehabilitation centers according to guidelines established by NOAA National Marine Fisheries Service. Data collected from harbor seals that stranded San Juan County in 2004, 2005 and 2006 were used to determine if physical examination and clinical chemistry results collected at the time of admission could be used to predict rehabilitation success. Of 105 seal pups rehabilitated over the three year period, 71% (n=79) were successfully rehabilitated and released. Analysis of clinical examination findings and blood parameters collected at admission suggests that seal pups are more likely to be successfully rehabilitated if, upon admission, they have no indications of prior trauma (n=105, p<0.05), an attitude evaluation of bright, alert and responsive or quite alert and responsive (n=102, p<0.05), and a high length:weight ratio (n=102, p<0.05). Clinical chemistry results and other physical exam findings were not predictive of rehabilitation success. The physical exam findings of prior trauma, mentation, and length:weight ratio could be used to prioritize selection of seal pups for rehabilitation in situations when rehabilitation centers have financial or spatial constraints that limit the number of seal pups that can be admitted for rehabilitated.