

Monitoring Changes in Seal Populations

Seals are excellent indicators of ecosystem health because they are a major component of the marine food web and respond promptly to changes in the marine ecosystem. The park intensively monitors northern elephant seals and harbor seals. Biologists monitor the seal terrestrial colonies where seals come onshore to pup, breed and rest. The information gleaned from these studies is used to guide park management. For example, the park initiated a stewardship program to educate park visitors and protect seals as new elephant seal colonies formed in areas accessible to the public. Biologists also study environmental factors which may effect the seal population such as winter storms and associated high surf that can wash away newborn pups, El Niño events, landslides, and predation by white sharks. At Point Reyes, researchers will be able to measure the effects of sea level rise associated with global climate change, for example, that could significantly alter seal breeding habitat, pup survival, and survival of the species.

Harbor seals are the dominant and only year round resident pinniped at Point Reyes. The Point Reyes seal population represents the largest concentration of harbor seals in the State of California, other than the Channel Islands, accounting for 20% of the

mainland breeding population and for the largest concentration in the state. In 2006, volunteers completed 221 surveys at sites in Marin County between March 1st and July 31st. The combined maximum pup count total for all sites during the breeding season was 1,056 pups. The 2006 pup count is only 6% lower than 2005. Pup numbers appeared to decrease slightly since 2004, and 2006 was the lowest pup count recorded since 1998. Drakes Estero and Double Point continue to show the highest numbers of pups, together producing 56% of the pups seen. The decline in the overall number of pups produced in 2006 compared to the previous five years may be related to changes in marine conditions. Upwelling was much reduced in 2006 and similar to 2005, resulting in reduced algal and krill, which in turn may affect food availability for harbor seals.



Volunteer docents observing and counting seals along the Headlands

