

Project Proposal:

Log Pond Harbor Seal Recolonization Study

BACKGROUND

- In August of 2015, the log booms that were used as a haul-out site by the seals was permanently removed and some logs were relocated to wrap a dock nearby.
 - Since this removal, we have noticed a decrease in seal numbers from those usually documented during each season.
- Currently, there is little known about the rate at which harbor seals will repopulate an urban area after a haul-out site has been removed.

To address this lack of information and provide insight into the response of harbor seals to anthropogenic activities we propose the following:

1. Return the log booms to the position they held before removal
2. Closely monitor seal numbers, ideally throughout a year-long period of the logs being replaced
 - a. If a year is not feasible, the second most useful period for replacement would be through the next pupping season (April 2017- September 2017)
3. Report on the recolonization behavior of the harbor seals in Bellingham Bay to help inform development plans for this and future projects

OBJECTIVES

1. Monitor the recolonization rate of harbor seals after the haul-out site has been removed and replaced
2. Understand whether the presence of a haul-out site is a determining factor for harbor seal abundance, even in the face of other construction activities
3. Provide insight into how the Port of Bellingham and the City of Bellingham can incorporate harbor seals into their development plans so that citizens can benefit from the presence of marine mammals in the new Waterfront Development
4. Increase the scientific knowledgebase for marine mammal behavior in urban habitats and the potential for restored populations in urban areas

TIMEFRAME

	Task	Proposed Date
Phase One	Log Boom Replacement	Sept. 1, 2016
Phase Two	Seal Abundance Monitoring	Sept. 1, 2016 – Sept. 1, 2017
Phase Three	Analysis of Recolonization Success and continued long-term monitoring	Sept. 1, 2017

CURRENT DATA

Average Seal Abundance

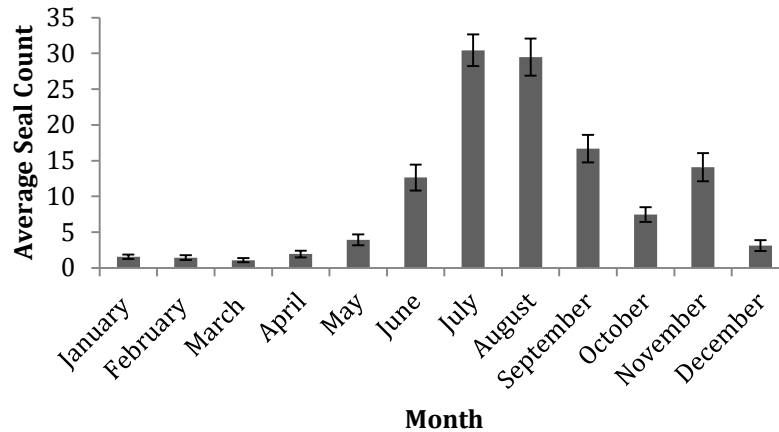
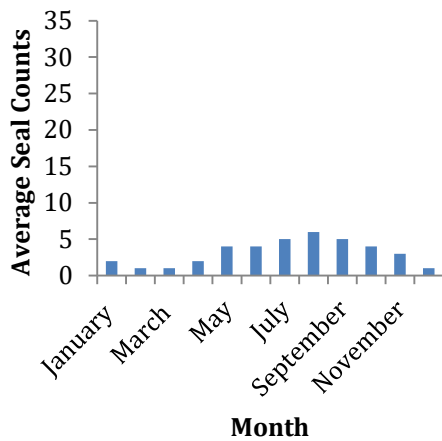


Figure 1. Average monthly seal numbers from January 2007- May 2016 (excluding 2009-2011 in which no counts were collected).

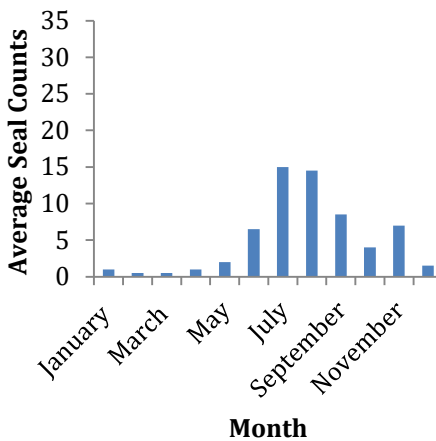
PROJECTED SCENARIOS

Scenario 1



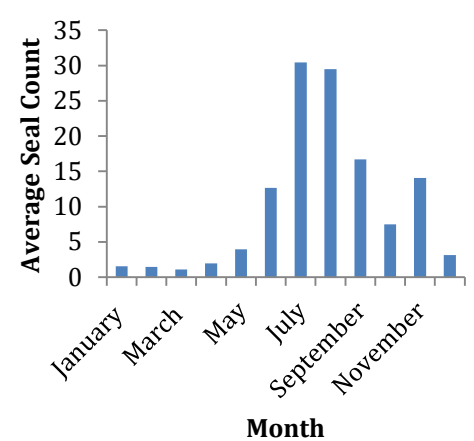
Scenario 1: No apparent restoration in seal numbers, counts remain low.

Scenario 2



Scenario 2; Seal numbers restored to less than the historical averages, but are not as low as scenario 1.

Scenario 3



Scenario 3: Seal numbers restored to historical averages.

NEXT STEPS

- Possible publication of findings
- Recommendations for strategies to keep harbor seals abundant in urban areas