

Thursday, April 3, 2014

Folks,

The Chinook have just begun to show up, and the Steller sea lion numbers have increased quite a bit. California Sea Lions have also just begun to show up at Bonneville, but not like at Astoria (see attached photo courtesy of Matt Tennis, PSMFC), where a record 1,420 CSL were counted in the East Mooring Basin on March 31! Less than 10% of those CSL are branded (the past couple years it has been around 30-50%), indicating a lot of new recruits to the Astoria basin, likely brought in by the strong smelt run up the Columbia River this year.

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STATUS REPORT - PINNIPED PREDATION AND DETERRENT ACTIVITIES AT BONNEVILLE DAM, 2014

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This is the third bi-weekly status report for 2014 and summarizes all pinniped predation monitoring and deterrent activities at Bonneville Dam from January 1 through April 2, 2014 (unless otherwise noted). Regular daylight observations began January 9 and will continue through the end of May, five days per week excluding holidays. Final predation estimates will be expanded for hours and days not observed, adjusted for “unknown” prey species take, and a night time predation factor is applied at the end of the observation season. Those updated figures will be presented in our annual field report. This report can be found at: <http://www.nwd-wc.usace.army.mil/tmt/documents/fish/>.

PRELIMINARY RESULTS

All data presented here are preliminary as of the status report date. Predation figures are unexpanded (unless otherwise noted) and sea lion abundance estimates will likely change as the season progresses and data are proofed and analyzed. Please use these estimates with appropriate caution. A final report summarizing the results of the 2014 evaluation will be available in the fall of this year.

PINNIPED ABUNDANCE

At least five California sea lions (*Zalophus californianus* – CSL) have been seen at Bonneville so far this year (Figure 1), although still rather briefly and sporadically. Steller sea lion (*Eumetopias jubatus* - SSL) numbers have really picked up this past week (Figures 1) but are still averaging much less than the past three years (figure 2). The maximum number of SSL seen any day so far this year was 20 (Figure 1). We have documented approximately 29 different SSL's visiting the dam so far. All but 5 of the SSL have been confirmed as seen in past years, although there are likely more new individuals. There have been many smaller Steller sea lions swimming in groups at the dam. It appears they are younger and have not been here before, however, we were unable to get good photo or video documentation of them.

Few SSL have been observed hauling out anywhere on the project so far this winter.

PREDATION DATA

Unexpanded numbers for fish observed taken in the Bonneville Dam tailrace for 2014 (through April 2) are:

<i>Prey</i>	<i>California Sea Lions</i>	<i>Steller Sea Lions</i>	<i>Total</i>
Chinook	1	27	28
Steelhead	0	36	36
Sturgeon	0	65	65
Lamprey	0	0	0
Shad	0	2	2
Smolt	0	0	0
Other	0	0	0
Unknown	0	29	29

Most sturgeon were caught in the powerhouse 2 tailrace, followed by the spillway and powerhouse 1 (Figure 3). Estimated sturgeon catch (expanded for weekends only) is the lowest seen since we began recording in 2006 (Figure 4). Most sturgeon taken have been in the 2 to 4 foot range. Steelhead and Chinook passage began to pick up the past two weeks (2,651 steelhead and 629 Chinook) from January 1 through April 2. Total salmonid passage is now similar to most of the past 10 years to date. Total salmonid catch through April 2 (86 expanded by interpolating for weekends) is fewer than all previous years (2013 – 217, 2012 – 273, 2011 – 506, 2010 – 866, 2009 – 636, 2008 – 747, 2007 – 502, 2006 - 543), all except one were by Steller sea lions.

DETERRENTS/TRAPPING

Hazing by USDA (land) began on March 1 and will continue until the end of May, seven days a week. CRITFC began hazing from boats March 10.

The states have not conducted any trapping at Bonneville Dam and do not plan to until California sea lions show up in bigger numbers.

OTHER ITEMS OF INTEREST

CRITFC has been doing regular surveys of Phoca Rock (Rm 132) and have reported between 3 and 22 SSL most weekdays. This is more than we had been seeing at Bonneville Dam until recently. They reported seeing 41 sea lions between Bonneville and Longview on April 1, most of them in the Portland/Vancouver area.

Matt Tennis of PSMFC reported a record 1,420 CSL in the east mooring basin in Astoria on March 31 (Figure 7). That is more than 500 more than the previous record.

The CSL B325 has been seen hauling out up at the marina in The Dalles fairly regularly all winter (Robin Brown, pers. comm.).

Figure 1. Daily pinniped abundance, by species, at Bonneville Dam, 2014.

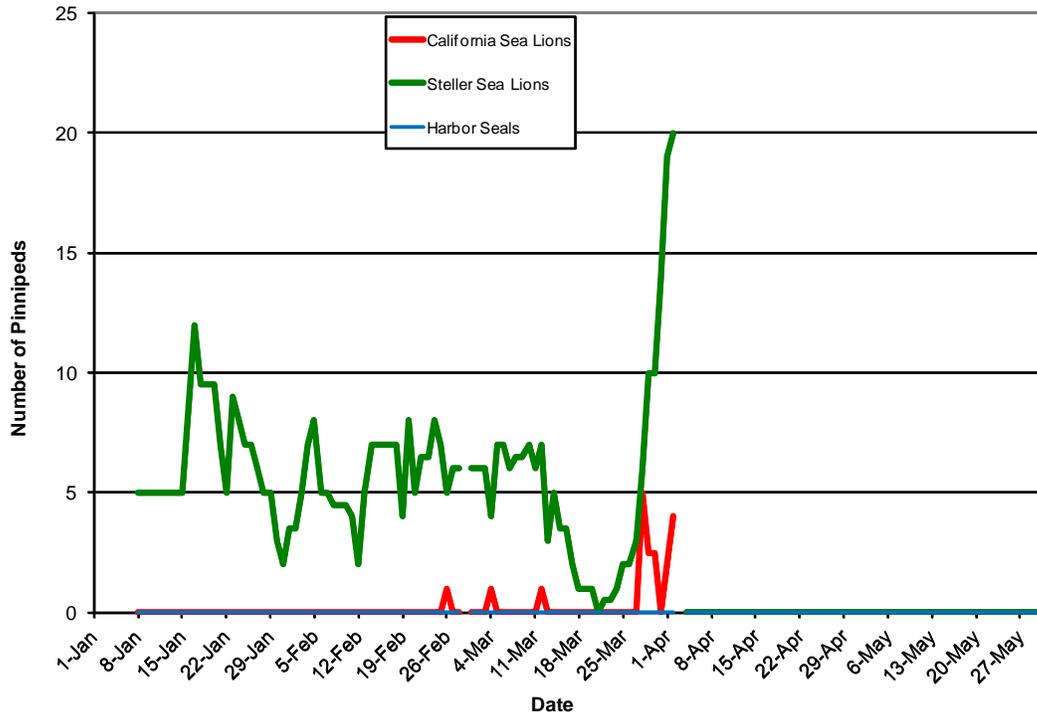


Figure 2. Average daily presence of pinnipeds, by species, to date (April 2) for each year at Bonneville Dam.

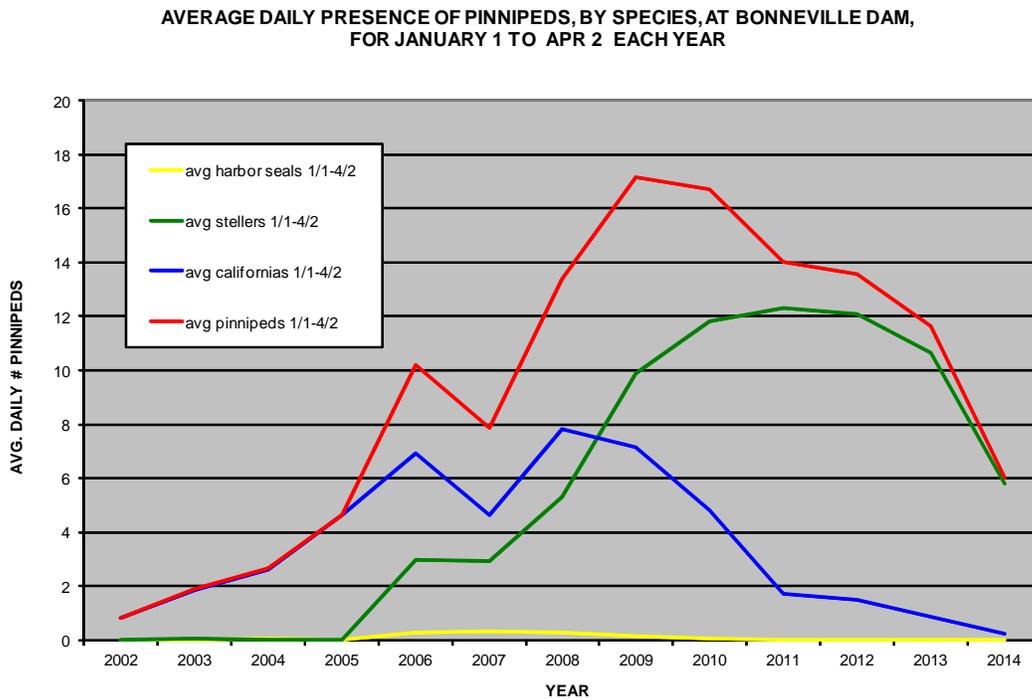


Figure 3. Distribution of prey taken by Pinnipeds by location at Bonneville Dam, through April 2, 2014.

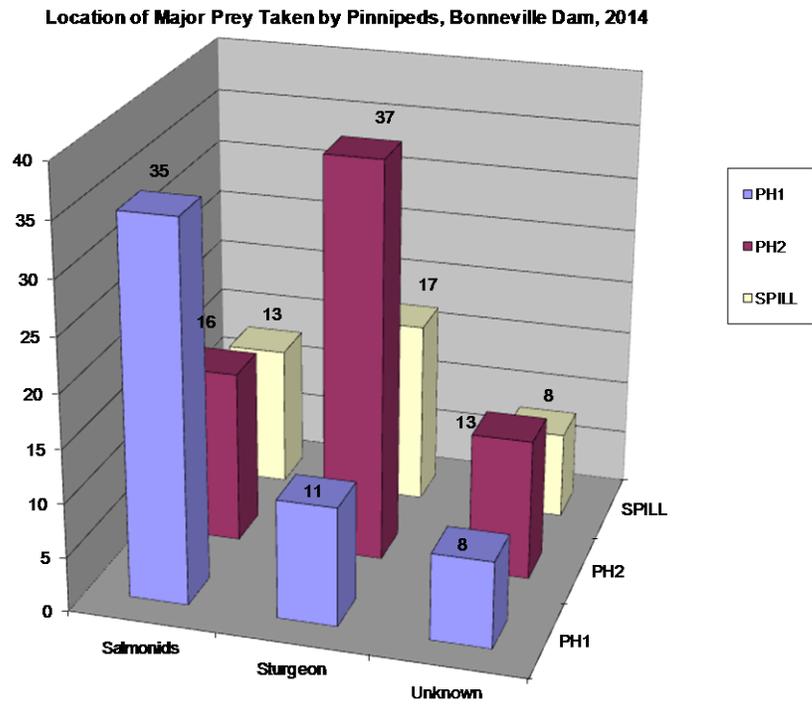


Figure 4. Daily cumulative sturgeon catch (interpolated for weekends) at Bonneville Dam, 2006-2014.

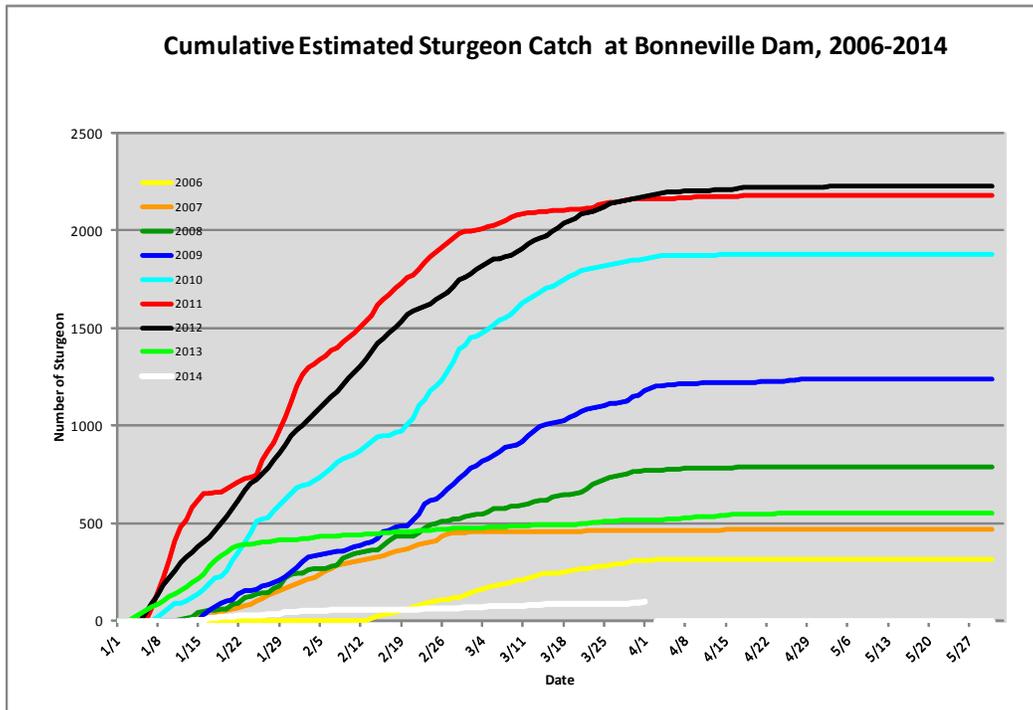


Figure 5. Daily cumulative salmonid catch (interpolated for weekends) at Bonneville Dam, 2002-2014. (White is 2014 catch; data collection started later than normal for 2005.)

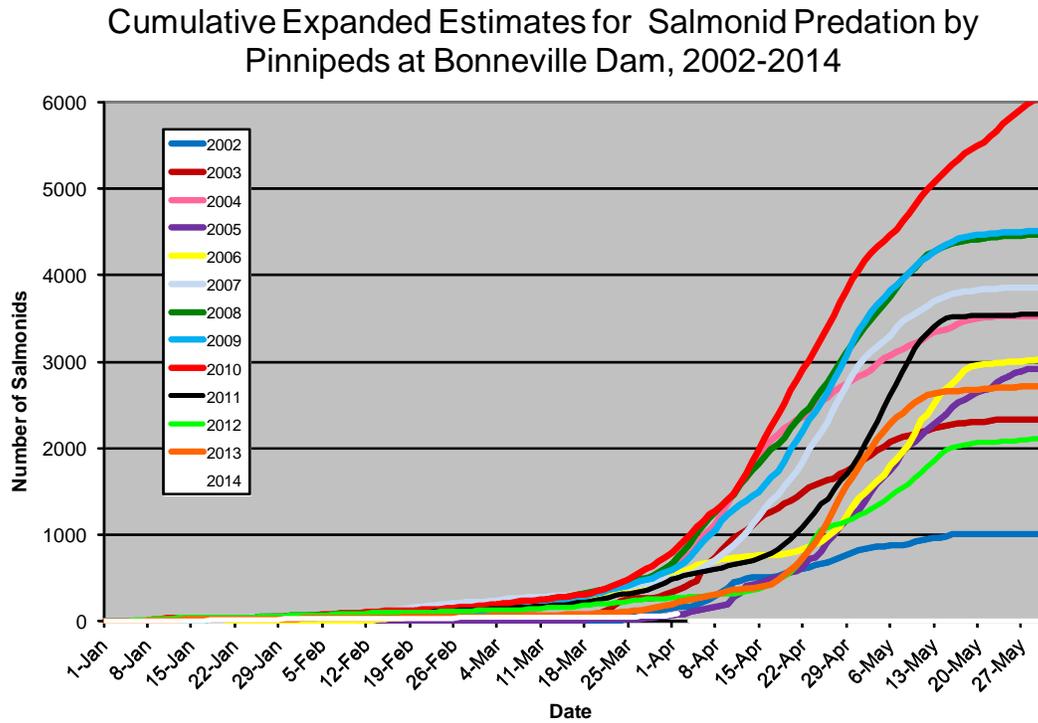


Figure 6. Photo of just one of the East Mooring Basin docks in Astoria on March 31, 2014. Photo taken by Matt Tennis.

