**Methods**

**Assessment of the impact of sample size on the variability of fecundity rates**

To assess the impact of sample size on the variability of fecundity rates we conducted a simulation analysis. We bootstrapped (random sampling with replacement from the original dataset) individual seals at different resampling intensities (from 5 to 100 individuals in increments of 5 seals). We used data from recent years when the sample size was greater than 100 individuals (i.e. 2006, 2009-2011, Table 2). We drew 10000 bootstrap resamples (nboot=10000) each year at each resampling level. We calculated the fecundity rate from each bootstrap resample, and calculated the variance across bootstrap resamples.

**Results**

The variance in fecundity rate is an exponentially decreasing function of sample size (Figure XX). The variance shows a very steep decline as sample size increases, until reaching sample sizes of around 40-50 seals when the curve becomes asymptotic (Figure XX).

