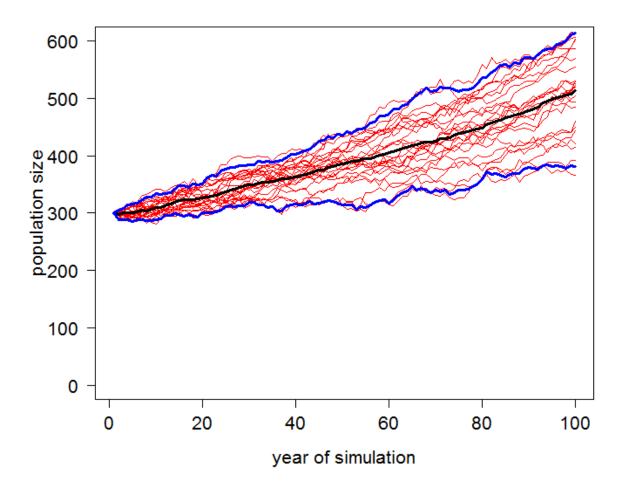
## **Supporting Information**

**Figure S1.** Example of population trajectories from the individual based model. Black line shows median population growth, blue lines  $2.5^{th}$  and  $97.5^{th}$  percentiles from ordered population growth trajectories. For clarity only 25 simulations are shown. Potential population growth,  $\lambda$ , is calculated from the last 40 years of the simulations.



**Figure S2**. Example of the output from the individual based model for Southern Resident Killer Whale simulations showing the estimated PCB concentration (lipid weight) in female blubber by age at an annual accumulation of 5 mg/kg lipid.

