



Figure S1: Population dynamic cycles with a resource independent fecundity. The fecundity is made independent by substituting the resource density in the function of the individual fecundity with the equilibrium resource density ($\beta(\tilde{R}, \ell(t, a))$). The cycles are the same as the cycles represented in figure 3b and c. This shows that this type of cycles is not caused by a fluctuations in the individual fecundity. The maturation rate is calculated as the inverse of the prospective age at maturation if the current resource density remained constant (a_J^{-1}). The fecundity is calculated as the population birth rate divided by the number of adults ($\frac{n(t,0)}{\int_{a_J}^{a_{max}} n(t,a)da}$). Note the different vertical axis for the consumer densities.