



**Figure S3. Sensitivity of the egg production dynamics to changes in the duck life span,  $1/\mu_d$ .** System (8-12) was integrated numerically, using the mean values of the parameters in Table 1. Other parameters used are  $\gamma_2 = 1/21 \text{ d}^{-1}$ ,  $\delta = 0.01 \text{ d}^{-1}$ ,  $\eta = 0 \text{ d}^{-1}$  and  $\mu_m = 1/30 \text{ d}^{-1}$ . Our results are clearly insensitive to the duck life span.