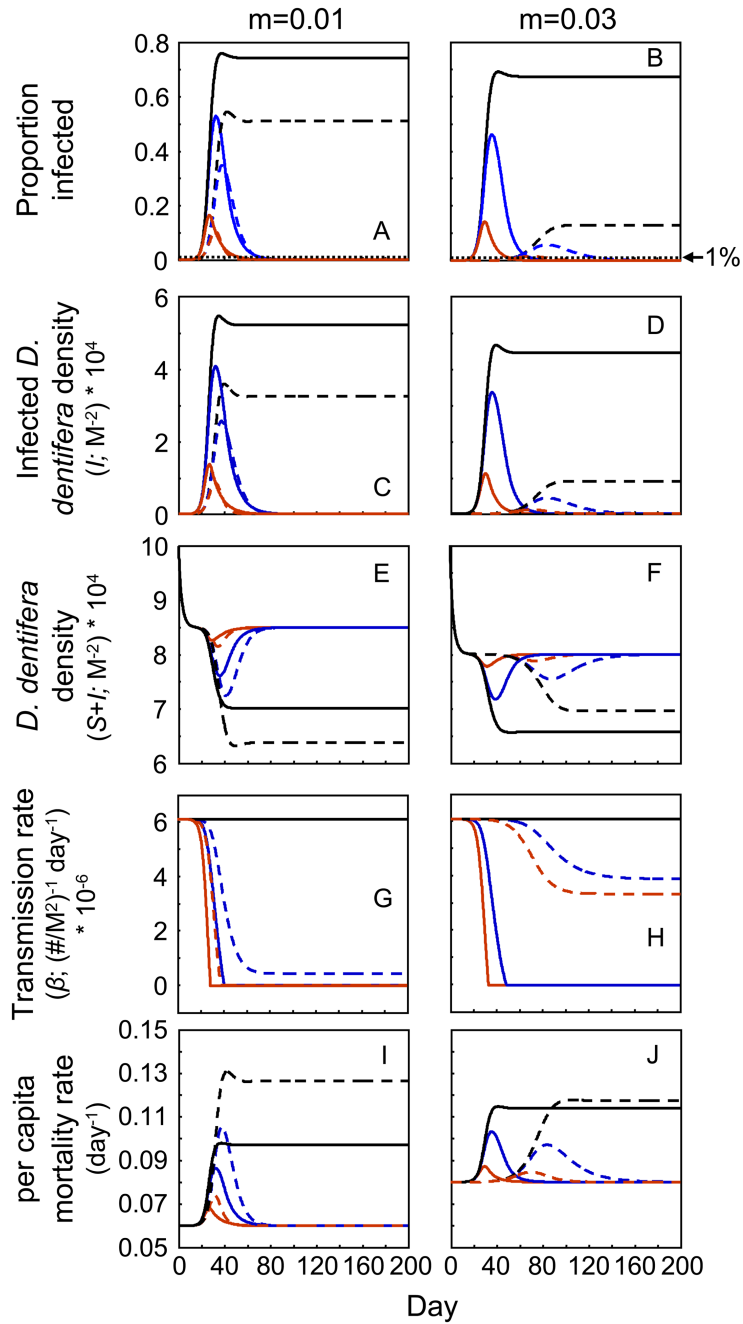


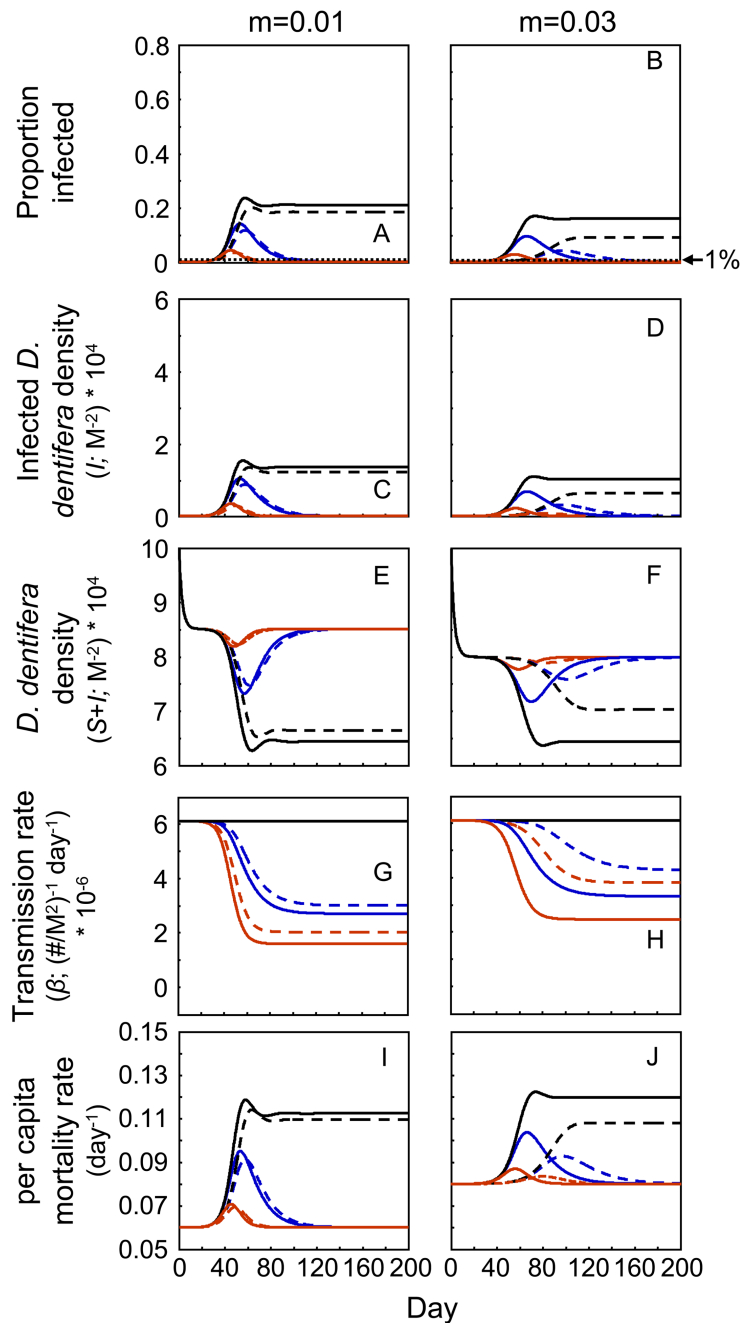
**Appendix B from M. A. Duffy and S. R. Hall, “Selective Predation and Rapid Evolution Can Jointly Dampen Effects of Virulent Parasites on *Daphnia* Populations”**

**(Am. Nat., vol. 171, no. 4, p. 499)**

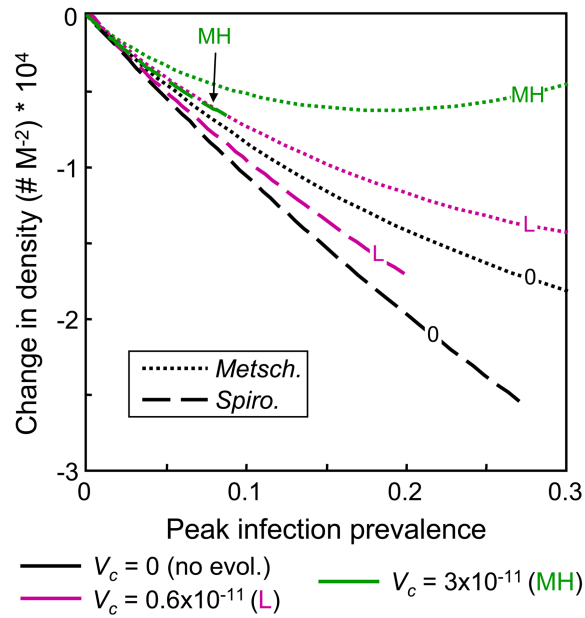
## Figures



**Figure B1:** Examples of *Daphnia-Metschnikowia* interactions as predicted by our evo-epidemiological model simulated at two predation mortality rates,  $m = 0.01$  and  $0.03 \text{ day}^{-1}$ . Graphs show dynamics of (A, B) infection prevalence (proportion infected), (C, D) density of only infected *Daphnia dentifera*, (E, F) overall density of *D. dentifera*, (G, H) change in transmission rate, and (I, J) per capita mortality rate of the host population ( $d$ ). Simulations for selective predation are shown with dashed lines; nonselective predation is shown with solid lines. Black lines:  $V_c = 0$ ; blue lines:  $V_c = 1 \times 10^{-11}$ ; red lines:  $V_c = 6 \times 10^{-11}$ , corresponding to colors in figure 4. The dotted line in A and B indicates 1% infection prevalence.



**Figure B2:** Dynamics of *Daphnia-Spirobacillus* interactions at two predation mortality rates,  $m = 0.01$  and  $0.03 \text{ day}^{-1}$ . Graphs show dynamics of (A, B) infection prevalence (proportion infected), (C, D) density of only infected *Daphnia dentifera*, (E, F) overall density of *D. dentifera*, (G, H) change in transmission rate, and (I, J) per capita mortality rate of the host population ( $d$ ). Simulations for selective predation are shown with dashed lines; nonselective predation is shown with solid lines. *Black lines:*  $V_c = 0$ ; *blue lines:*  $V_c = 1 \times 10^{-11}$ ; *red lines:*  $V_c = 6 \times 10^{-11}$ , corresponding to colors in figure 4. The dotted line in A and B indicates 1% infection prevalence.



**Figure B3:** Relationship between peak infection prevalence and drop in host density for simulations of *Metschnikowia* and *Spirobacillus* epidemics. Note that both peak infection prevalence and drop in density are outcomes of the simulations (i.e., peak prevalence is not an independent parameter but instead was manipulated by changing the selective predation rate  $m$ ). *Black lines:*  $V_c = 0$ ; *purple lines:*  $V_c = 0.6 \times 10^{-11}$ ; *green lines:*  $V_c = 3 \times 10^{-11}$ , corresponding to colors in figure 4. Dotted lines show simulations of *Metschnikowia* epidemics; long dashed lines show simulations of *Spirobacillus* epidemics.