$$E[AA]_{t+1} = sP_t + s\frac{Q_t}{4} + (1-s)P_t^2 + (1-s)P_tQ_t + (1-s)\frac{Q_t^2}{4}$$

$$= \cdots$$

$$= s\left[P_t + \frac{Q_t}{4}\right] + (1-s)p_t^2$$

$$E[AB]_{t+1} = s\frac{Q_t}{2} + (1-s)2p_tq_t$$

$$E[BB]_{t+1} = s\left[R_t + \frac{Q_t}{4}\right] + (1-s)q_t^2$$

Equilibrium Genotype Frequencies (s=0.5)