$$p_{t+1} = P_{t+1} + \frac{1}{2}Q_{t+1}$$

$$= \left(P_t + \frac{1}{4}Q_t\right) + \frac{1}{2}\left(\frac{1}{2}Q_t\right)$$

$$= P_t + \frac{1}{2}Q_t$$

$$= p_t$$

Inbreeding DOES NOT change allele frequencies, only genotype frequencies!

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Generational Changes in F

$$F_1 = 1 - \frac{H_O}{H_E} = 1 - \frac{Q_1}{2pq}$$