

Shared  
hyper-  
parameters

$$\vec{\Theta} \sim \vec{\mu}$$

Species  
Specific  
Parameters

$$q_1, B_{1,0}, r_1, \sigma_1^2$$

$$q_2, B_{2,0}, r_2, \sigma_2^2$$

$$q_3, B_{3,0}, r_3, \sigma_3^2$$

Data

$$I_{1,t}$$

$$I_{2,t}$$

$$I_{3,t}$$