

How computers help us

$$\frac{1}{N_1} \frac{dN_1}{dt} = r_1 - \alpha_1 N_1^{\theta_1} + \beta_1 N_2$$

$$\frac{1}{N_2} \frac{dN_2}{dt} = r_2 - \alpha_2 N_2^{\theta_2} + \beta_2 N_1.$$

An equation published by me

An equation published by Denise Bruesewitz in ES

$$\frac{dP}{dt} = G \times P - Zgp - Pm \times P - Pl \times G \times P$$

$$\frac{dZ}{dt} = Zgp \times Zep + Zgb \times Zeb + Zgd \times Zed - Ze \times Z - Zm \times Z$$

$$\frac{dBA}{dt} = Bdone + Bnhe - Zgb - BAm \times BA$$

$$\frac{dNN}{dt} = DNN - G \times Fnn \times P$$

$$\frac{dNH}{dt} = DNH - G \times Fnh \times P - Bnhe + BAm \times + \left(\frac{3}{4} \times Ze \times Z\right) + \left(\frac{2}{3} \times Zm \times Z\right)$$

$$\frac{dDON}{dt} = DDON + Pl \times G \times P + c \times D + \left(1 - \frac{3}{4}\right) \times Ze \times Z - Bdone - s \times DON$$

$$\frac{dD}{dt} = (1 - Zep) \times Zgp + (1 - Zeb) \times Zgb - Zgd \times Zed - c \times D + Pm \times P + \frac{1}{3} \times Z$$

$$Ae = e^{-a \times NH}$$

$$Fnn = \left(\frac{NN \times Ae}{NN + Knn} \right)$$

$$Fnh = \left(\frac{NH}{NH + Knh} \right)$$

$$e = Zgpp \times P + Zgpb \times BA + Zgpd \times D$$

$$Zgp = Zg \times Z \times (Zgpp \times P) / (h + e)$$

$$Zgb = Zg \times Z \times (Zgpb \times B) / (h + e)$$

$$Zgd = Zg \times Z \times (Zgpd \times D) / (h + e)$$

$$G = Pg \times (Fnn + Fnh)$$

$$Bdone = \frac{BAe \times BA \times DON}{Kba + DON + NH}$$

$$Bnhe = \frac{BAe \times BA \times NH}{Kba + DON + NH}$$

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