1 Model 1

$$P_e = 0.254068, P_b = 0.719916$$

$$E = (1 - 0.92) \times n_e \times 0.254068 + (1 - 0.55) \times n_b \times 0.719916 = 0.323962n_b + 0.0203254n_e$$

$$\frac{n_e}{4200} + \frac{n_b}{5800} = 1 \Rightarrow n_b = 5800 - \frac{29}{21}n_e \Rightarrow E = 1878.98 - 0.427051n_e$$

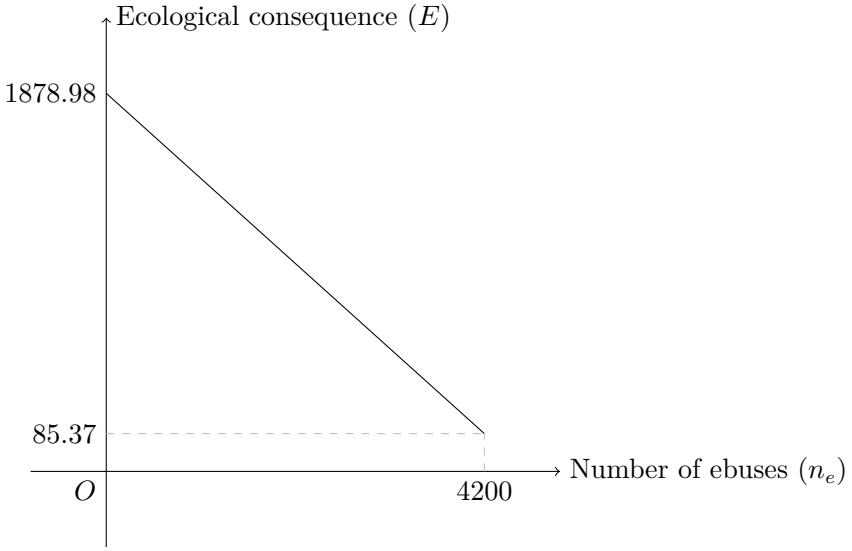

Figure 1: Caption

2 Model 2

$$C = C_e + C_s = 4200 \times 400000 + \frac{4200 \times 9000}{\beta} = 1680000000 + \frac{37800000}{\beta}$$

$$b = 350.79, \frac{\mathrm{d}p}{\mathrm{d}t} = \theta bt$$

$$p(t) = \begin{cases} \frac{1}{2}\theta bt^2 - C = 175.395\theta t^2 - 1680000000 - \frac{37800000}{\beta}, & 0 \le t \le \frac{4200}{\theta} \\ \frac{1}{2}\theta b(\frac{4200}{\theta})^2 - C = \frac{3093967800}{\theta} - 1680000000 - \frac{37800000}{\beta} & t \ge \frac{4200}{\theta} \end{cases}$$

Figure 2: Caption