CHAPTER 53: POPULATION ECOLOGY

5. Patterns of dispersion
- Starfish: Clumped
- Nesting king penguins: Uniform
- Daisies: Random

8. Survivorship curves
- Type I: High survival rates throughout life span
- Type II: Constant mortality rate
- Type III: High mortality rate in early stages

9. Survivorship curve of open nesting songbird
- High survival rates in early stages, then decline

19. Exponential model
- Population growth described by the equation $N(t) = N_0 e^{rt}$
- Rate of change of population size with respect to time
- $0.5N = \frac{dN}{dt}$
25 logistic model

population size \( (N) \)

\[ K = 1500 \]

\[ N = 1500 \]

\[ \frac{dN}{dt} = 1.0N \left( \frac{1500 - N}{1500} \right) \]

# of generations