5-1 Population growth

Describing Populations

* Factors in a population
  + , Density and Distribution, , age structure
* Geographic Range
  + The area
  + Can be
  + Give an example of 1 large and 1 small Range on page 131

Small Large

* Density and Distribution
  + Population density refers to the
  + Distribution refers to how the
  + Describe the 3 types of distributions on page 131

Random Uniform Clumped

* Growth Rate
  + Determines whether size will
  + What is the Hydrilla growth rate in Florida?
* Age Structure
  + The number of of each population contains
  + Cant until a certain age

Population Growth

* Birth and Death Rate
  + Population if more individuals are in a period of time
* Immigration and Emigration
  + Population grow if individuals an area ( )
  + Population drops if individuals an area ( )
  + What would cause individuals to move into or out of an area? (Page 132)

Exponential Growth

* The larger a population gets the
  + Under conditions 🡪
* How is the time of exponential growth different in species that reproduce fast compared to species that reproduce slow?
* What happens to the growth of organisms in a new environment? Page 133

Logistic Growth

* Eventually exponential growth
* 3 phases of growth
  + Phase 1 – rapid growth:
  + Phase 2 – Slows down:
  + Phase 3 – Growth Stops: Carrying capacity stabilizes

Logistic Growth Curve

* Occurs when a population’s growth slows then stops after a period of exponential growth
  + “ ” shape curve
  + Give three reasons why population growth will slow

1) 2) 3)

Carrying Capacity

* When rates , population
  + Still may rise and fall but remain
* The broken line of the graph on page 134 represents the maximum number of species that area can sustain 🡪