Ch.8 Glossary

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| **age structure** | Percentage of the population (or number of people of each sex) at each age level in a population. |
| **asexual reproduction** | Reproduction in which a mother cell divides to produce two identical daughter cells that are clones of the mother cell. This type of reproduction is common in single-celled organisms. Compare sexual reproduction. |
| **biotic potential** | Maximum rate at which the population of a given species can increase when there are no limits on its rate of growth. See environmental resistance. |
| **carrying capacity (K)** | Maximum population of a particular species that a given habitat can support over a given period. |
| **dieback** | Sharp reduction in the population of a species when its numbers exceed the carrying capacity of its habitat. See carrying capacity. |
| **environmental resistance** | All the limiting factors that act together to limit the growth of a population. See biotic potential, limiting factor. |
| **exponential growth** | Growth in which some quantity, such as population size or economic output, increases at a constant rate per unit of time. An example is the growth sequence 2, 4, 8, 16, 32, 64 and so on; when the increase in quantity over time is plotted, this type of growth yields a curve shaped like the letter J. Compare linear growth. |
| **intrinsic rate of increase (r)** | Rate at which a population could grow if it had unlimited resources. Compare environmental resistance. |
| **J-shaped curve** | Curve with a shape similar to that of the letter J; can represent prolonged exponential growth. See exponential growth. |
| **K-selected species** | Species that produce a few, often fairly large offspring but invest a great deal of time and energy to ensure that most of those offspring reach reproductive age. Compare r-selected species. |
| **K-strategists** | See K-selected species. |
| **linear growth** | Growth in which a quantity increases by some fixed amount during each unit of time. An example is growth that increases in the sequence 2, 4, 6, 8, 10, and so on. Compare exponential growth. |
| **logistic growth** | Pattern in which exponential population growth occurs when the population is small, and population growth decreases steadily with time as the population approaches the carrying capacity. See S-shaped curve. |
| **population density** | Number of organisms in a particular population found in a specified area or volume. |
| **population dispersion** | General pattern in which the members of a population are arranged throughout its habitat. |
| **population distribution** | Variation of population density over a particular geographic area. For example, a country has a high population density in its urban areas and a much lower population density in rural areas. |
| **population dynamics** | Major abiotic and biotic factors that tend to increase or decrease the population size and age and sex composition of a species. |
| **population size** | Number of individuals making up a population's gene pool. |
| **r-selected species** | Species that reproduce early in their life span and produce large numbers of usually small and short-lived offspring in a short period. Compare K-selected species. |
| **r-strategists** | See r-selected species. |
| **reproduction** | Production of offspring by one or more parents. |
| **reproductive potential** | See biotic potential. |
| **S-shaped curve** | Leveling off of an exponential, J-shaped curve when a rapidly growing population exceeds the carrying capacity of its environment and ceases to grow. |
| **sexual reproduction** | Reproduction in organisms that produce offspring by combining sex cells or gametes (such as ovum and sperm) from both parents. This produces offspring that have combinations of traits from their parents. Compare asexual reproduction. |
| **survivorship curve** | Graph showing the number of survivors in different age groups for a particular species. |