

APES Chapter 8.1 – 8.3 Objectives: "Population Dynamics"

1. Define four variables which collectively determine *population dynamics*.
2. Write the relationships among the four variables that determine *changes in population*.
3. Define *zero population growth*.
4. Define *biotic potential* and list 4 factors, which contribute to it.
5. Define *carrying capacity*
6. **Draw** population growth curves that reflect *exponential growth*, *exponential growth leveling off gradually to limits* and *exponential growth limited by a reproductive time lag* and identify one organism which exemplifies each.
7. Distinguish between *density-dependent* and *density-independent* checks on population growth, and list 3 examples of each.
8. Distinguish between *r-strategists* and *K-strategists*, and give two examples of each.
9. **Draw** the type of *survivorship curve* you would expect each type of strategist to exhibit. Explain the meaning of the curves.