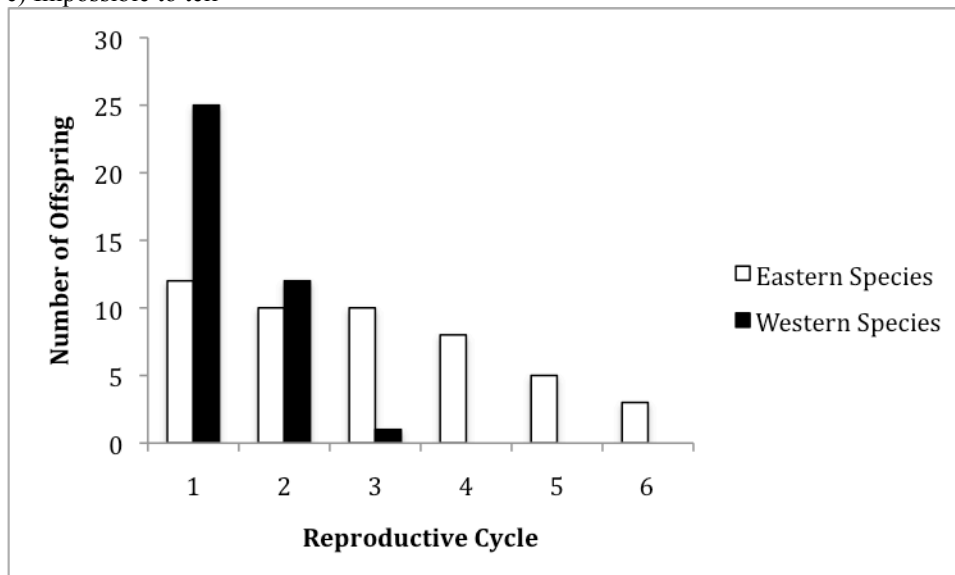


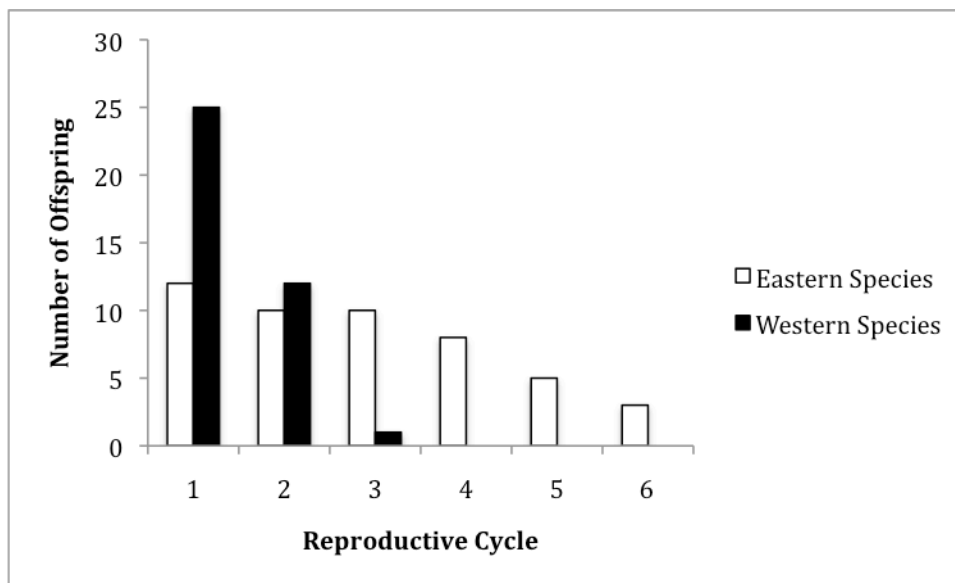
Life-history Pre-quiz A

- 1) In areas where there are few predators, animals are likely to:
- a) Not reproduce since they are not going to get eaten.
 - b) Reproduce at an older age/ larger size
 - c) Reproduce at a younger age/smaller size
 - d) Have smaller babies since they don't need to fight off predators.
- 2) Animals may not put energy into maintaining their bodies at the end of their lives because:
- a) They are old and forget
 - b) It allows them to put more into growth
 - c) It allows them to put more energy into somatic maintenance
 - d) It allows them to put more into reproduction
- 3) I have two jackrabbits. One has longer ears than the other. Ears are used to cool off in the hot weather. In a particular hot summer, which of the following would be an example of natural selection?
- a) The jackrabbit with the longer ears survives the summer and has 30 babies; the shorter-eared rabbit dies of the heat.
 - b) The jackrabbit with the shorter ears grows them longer during that summer in order to survive.
 - c) A new organism evolves that has ears twice as long as the other two.
 - d) The jackrabbit with the longer ears survives but never finds a mate; the shorter-eared rabbit dies of the heat.
- 4) Which of the following is an example of terminal investment?
- a) An anteater that invests all of her time in gathering ants to grow larger rather than finding a mate and reproducing.
 - b) A beetle that has three offspring every season and lives three months past her last breeding season.
 - c) An octopus who lays thousands of eggs and then stays to guard them even though she will starve to death right before they are born.
 - d) A deer that outlives all the other deer in the area.
- 5) Below is a graph of two species of beetles and how many offspring they produce each season. One is from the eastern United States and the other is from the western United States. If all the beetles died after the first season due to a particularly cold winter, which beetle is the most fit?
- a) Eastern
 - b) Western
 - c) Impossible to tell



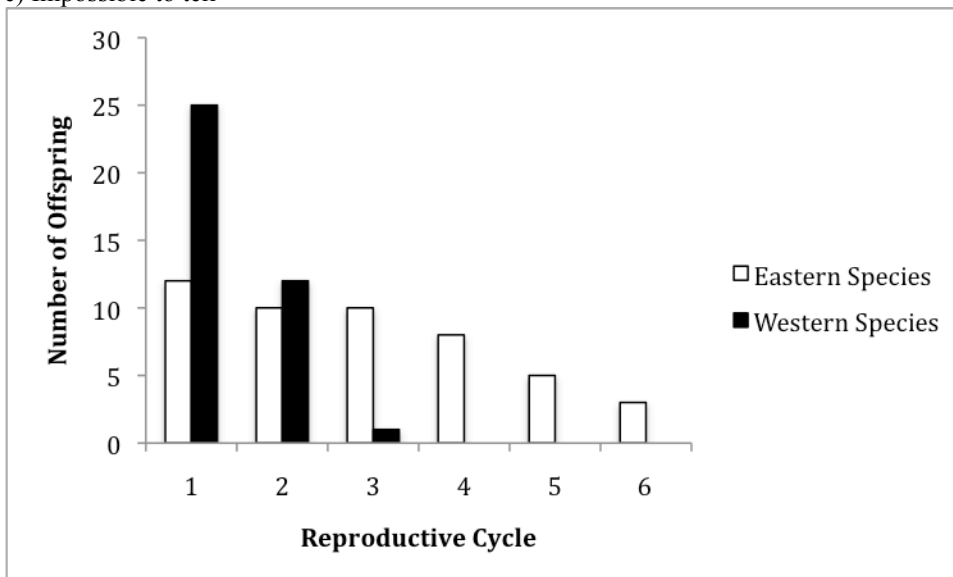
Life-history Pre-quiz B

- 1) In areas where there are lots of predators, animals are likely to:
- Not reproduce since their offspring are likely to be eaten anyway
 - Reproduce at an older age/ larger size
 - Reproduce at a younger age/smaller size
 - Have bigger babies that can fight off predators better
- 2) Animals may not put energy into reproduction early in their lives because:
- They are young and don't know about reproduction yet
 - It allows them to put more energy into growth
 - It allows them to put all their energy into somatic maintenance
 - It allows them to have more offspring while they're still young
- 3) Natural selection means:
- The environment determines which organisms will produce the most offspring
 - Organisms choose to change so they are better adapted to their environment
 - New organisms are created to fit in better in their environment
 - The biggest, fastest, strongest win
- 4) Terminal investment means:
- Organisms invest all their energy to upkeep their bodies so they don't die
 - Natural selection favors organisms that use up their energy the soonest
 - Organisms invest in reproduction rather than body maintenance when they are near death
 - The most successful organisms always live the longest
- 5) Below is a graph of two species of beetles and how many offspring they produce each season. One is from the eastern United States and the other is from the western United States. If both beetles lived until the end of the 6th season, who is the most fit?
- Eastern
 - Western
 - Impossible to tell



Life-history Post-quiz B

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Life-history Post-quiz A

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