

Ornithology Week 6 Practice Problems: Vocalizations and the Annual Cycle

- 1) Describe how amplitude, frequency, and time are portrayed on a sonogram.
- 2) Harmonics are the result of multiple sound-producing regions in the syrinx operating simultaneously (**T**, **F**, or **It Depends**)
- 3) Natural selection on foraging traits such as bill size can influence the frequency of a call through post-source modulation (**T**, **F**, or **It Depends**)
- 4) Which of the following correctly describes the acoustic adaptation hypothesis?
 - a) selection for communication efficacy leads to birds that live in denser habitats having higher-pitched calls
 - b) selection for communication efficacy leads to birds that live in more open habitats having higher-pitched calls
 - c) birds with larger body sizes have higher-pitched calls
 - d) birds with smaller body sizes have higher-pitched calls
- 5) Which of the following taxa are vocal learners? (You may circle more than one answer)
 - a) passerines
 - b) whales
 - c) bats
 - d) humans
- 6) What are the four major life cycle events (or “tasks”) for migratory birds?
- 7) Define zeitgeber.
- 8) Describe experimental evidence (real or hypothetical) for why intrinsic circadian rhythms are imperfect.
- 9) Which of the following influence the life cycle stage of a migratory bird?
 - a) photoperiod
 - b) pineal gland
 - c) nesting success or failure
 - d) weather