

### **Assignment A: Short Answer Questions**

1. Give an example of a demographic rate.
  
2. What can wildlife biologists learn by studying the demography of wild populations?
  
3. Researchers catch Black-throated Blue Warblers by playing a recording of another male's song and luring them into a mist-net. Why do you think males will fly to the sound of a different male's song in their breeding territory?
  
4. List some ecological factors that might limit the size of a population of birds.
  
5. By studying Black-throated Blue Warblers, scientists hope to learn more about how environmental conditions affect the reproductive success of migratory birds.
  - a) In your own words, define reproductive success.
  
  - b) In years when the population of squirrels and chipmunks was larger, did birds have higher or lower reproductive success? Why?
  
  - c) How did increasing the number of caterpillars change the reproductive success of these warblers?
  
  - d) Why does population growth slow at higher densities? What is the name for this phenomenon?

6. How might climate change impact Black-throated Blue Warblers in New Hampshire? Will it increase or decrease the amount of high-quality habitat for this species? Why?