Remember that biologists use thermal performance curves to assess an organism's overall ability to survive at given temperatures. Let's take a look at how the frog's performance in the different microhabitats is impacted and how they may be impacted by disease:

Place the Frog's Jumping Performance Curve over your histogram.

1. Did any of your data fall outside the upper temperature limit for this species? _____

   Explain _____

   _____

   _____

2. Look back at the Model Frog Temperature Profile in I, at what time of day and in which habitat did this occur? _____
3. What day-to-day activities might be affected by the frog's jumping performance? _____

   _____

   _____

4. What other environmental factors could affect a frog's behavior? _____

   _____

Next, place the Chytrid Fungus Thermal Performance Curve over your histogram.

5. At what temperature was the fungal population growing fastest? _____
6. Above what temperature does the fungus no longer grow? _____
7. For how many hours of the day was each frog too hot for the fungus to grow on its body?

   # of hours for the 'shade' frog _____ # of hours for the 'sun' frog _____

Next, place both the Frog's Jumping Performance Curve and Chytrid Fungus Thermal Performance Curve over your histogram.

8. Keeping in mind the chytrid fungus doesn't grow above 30°C, look at the jumping performance curve again. How does each frog perform:

   Below 30°C? _____

   At 30°C? _____

   Above 30°C? _____