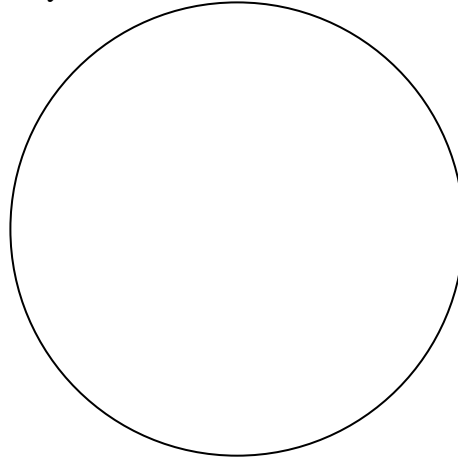


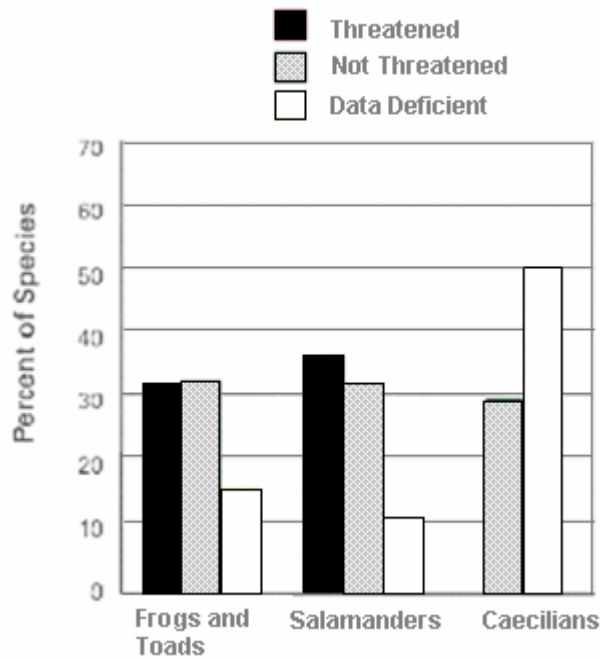
## Amphibians In Our Ecosystem

1. You just caught a leopard frog and decided to make it barf. Look at all the stuff that came out! You calculated the percentage of different types of food you found in its stomach. To the right, make a pie chart of your data. Remember to color it and include a key.

Crickets	50%
Ants	20%
Termites	5%
Spiders	10%
Beetles	5%
Worms	8%
Baby frogs	2%



2. The histogram below shows a comparison of threatened amphibians by group.



**Answer these questions:**

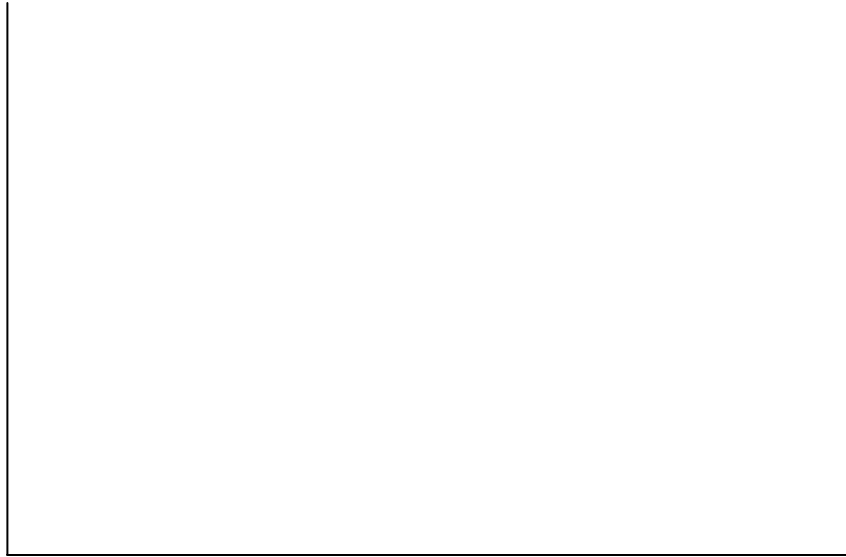
- a. Which amphibian group has the most threatened species?
- b. Which amphibian group has the most species with no data (data deficient)?
- c. Which amphibian group has UNDER 30% of “Not Threatened” species?
- d. What does this chart tell you about amphibian declines (there is more than one correct answer)?

3. Many people in New Mexico (especially those with lots of money!) want to live right next to the river. Why do you think this may lead to amphibian population declines?

**4. Part A.** Scientists have been studying leaf litter amphibians at La Selva, Costa Rica for over 35 years. They found that since 1970, the population density of all amphibian species in the forest has declined by about 75%. Create a plot of the data below and determine if you agree with the scientists.

**Individuals per 100m<sup>2</sup>**

1970	14
1971	10
1972	10
1973	11
1974	11
1982	10
1985	9
1990	10
1991	11
1995	8
1996	6
1999	5
2000	6
2003	5
2004	3
2005	4



**4. Part B.** Why are the leaf-litter frogs declining? The scientists also examined climate data for 35 years at the La Selva Biological Station. Below is a graph of their data.

- 1) At what year did they start recording these data?
- 2) What is happening to the daily minimum temperature?
- 3) What is happening to the number of dry days over time?
- 4) Some scientists claim that wetter, warmer conditions has caused a decrease in the leaf litter at La Selva. Less leaf-litter means fewer frogs! Based on these graphs, do you agree that the scientists may have a good point (explain)? What are some other reasons the frogs could be declining? Describe a procedure you could do to find out if another reason could explain the amphibian declines.

