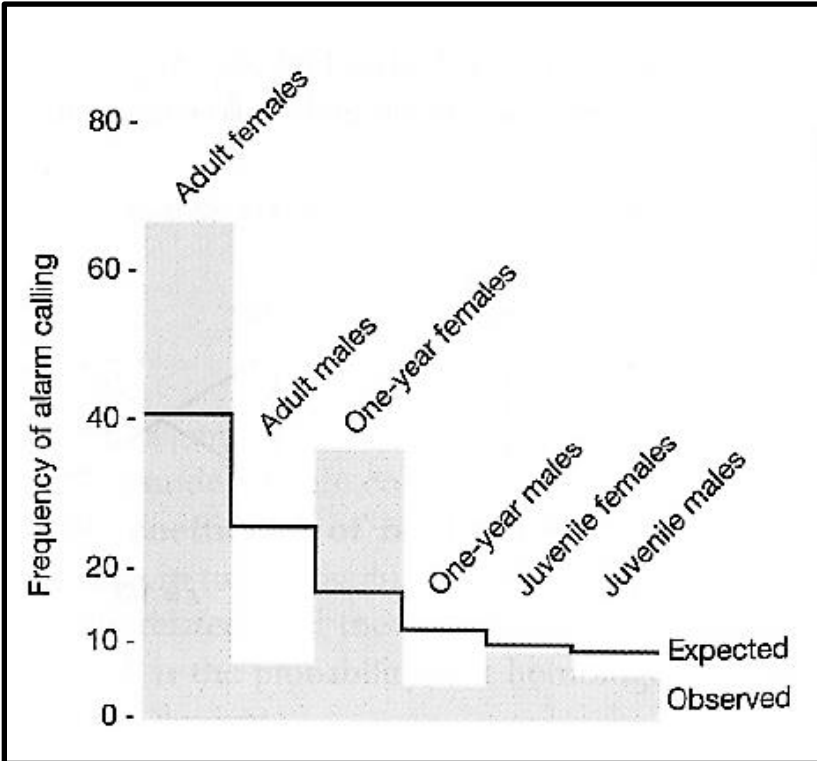


# SQUIRREL ALTRUISM

**Background:** On occasion, some animals behave in ways that reduce their individual fitness (survival) but increase the fitness of others. This kind of behavior is called altruisms, or selflessness. For example, under threat from a predator, an individual Belding's ground squirrel will make an alarm call to warn others, even though calling increases the chances that the caller is killed. In Belding's ground squirrels, the females often stick closely together, and are often related.

**Directions:** Use the graph below to answer the questions using complete sentences.



1) What does the x-axis represent?

2) What does the y-axis represent?

3) If you had to give this graph a title, what would it be? Why?

4) Who is more likely to give off an alarm call when a predator is near?

5) Why do you think this group is more likely to give off an alarm call?

6) What types of predators do you think would sound an alarm call?

7) Predict what will most likely happen to the squirrel that gave the alarm call?

8) How would you design an experiment to test if the data above is correct? Describe your experiment in detail.