**Student Worksheet: How an ant shook up an ecosystem**

**Directions**: Read the *Science News* article “[How an invasive ant changed a lion’s dinner menu](https://www.sciencenews.org/article/invasive-ant-lion-dinner-trees-ecosystem)” and answer the following questions as directed by your teacher

**How an ant shook up an ecosystem**

1. What biome is highlighted in the article? Name one type of interspecific interaction between organism species that is found in the article.

2. Describe the ecosystem disturbance in the article. Fill in the table below to trace each cause and effect and include data, statistics or numbers mentioned in the article where possible. Highlight where data isn’t provided and name the species involved.

|  |  |  |
| --- | --- | --- |
| **Species Involved** | **Cause and Effect** | **Data Provided** |
| 1. |  |  |
| 2. |  |  |
| 3.  |  |  |
| 4. |  |  |

**Graphing the data**

1. Graph the change in the percentage of zebra and buffalo kills by lions between 2002 and 2005. Make sure you label your axes and place data points where they are appropriate. If this trend continued, what can you infer would happen to the population of zebras over time? What about the buffalo? What other species could you add to your graph if you had appropriate data?

2. What was the duration of the study described in the article? How could you begin to predict the rate of change of the ecosystem’s food web resulting from this disturbance? What additional information and data might you need?

3. What is the limitation of having only two data points spanning the duration of the study? Why would it be helpful to have more data points?

**The mighty ant**

1. Apart from the lions’ diet, list some other indirect effects of the invasive ant species.

2. Pick one indirect effect that wasn’t mentioned in the article and trace what could happen to the ecosystem because of it.