Background:
Houses were being built in a large old field. In 1984, there were no houses in the field. In 1999, there were 250 houses.
A biologist found a population of the dusky field mouse living in the field.
The biologist sampled this population from 1988 to 2003.

Procedure:
1. Using the graph below, mark the horizontal axis with the years from 1988 to 2003.
   Label the horizontal axis “Years Sampled”
2. Mark the vertical axis from 0 to 400 using increments of 25.
   Label the vertical axis “Size of Mouse Population”
3. Plot the data on the graph. Connect the data points with a ruler.

Data and Observations:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Mice Per Acre</th>
<th>Year</th>
<th>Number of Mice Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>360</td>
<td>1996</td>
<td>192</td>
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<td>342</td>
<td>1997</td>
<td>184</td>
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<tr>
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<td>1994</td>
<td>195</td>
<td>2002</td>
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<tr>
<td>1995</td>
<td>170</td>
<td>2003</td>
<td>27</td>
</tr>
</tbody>
</table>

Questions:
1. What limiting factors affect the population of dusky field mice?
2. With what other living thing are these mice competing for survival?
3. What might be happening to the birthrate of mice?
4. List two factors that can decrease the mouse population.
5. Suppose in 2000, 65 mice emigrated. What would happen to the mouse population?
6. Predict what will happen to the mouse population in 2006?
7. List two factors that can increase the mouse population.
8. What effect would immigration have on the mouse population?

Conclusion:
What happens when two animal species compete?