Predator Prey Relationships Name:

In this lab you will analyze data on Snowshoe Hare (prey) and Lynx (predator).

**Procedure**: Graph the following data either by hand, or in Excel using an XY scatter plot.

|  |  |  |
| --- | --- | --- |
| year | Snowshoe Hare Population (thousand) | Lynx Population (thousand) |
| 1855 | 80 | 40 |
| 1857 | 62 | 30 |
| 1859 | 20 | 7 |
| 1861 | 5 | 4 |
| 1863 | 140 | 20 |
| 1865 | 160 | 60 |
| 1867 | 80 | 75 |
| 1869 | 10 | 5 |
| 1871 | 20 | 10 |
| 1873 | 60 | 30 |
| 1875 | 100 | 60 |
| 1877 | 70 | 100 |
| 1879 | 20 | 20 |
| 1881 | 20 | 20 |
| 1883 | 60 | 40 |
| 1885 | 140 | 80 |
| 1887 | 100 | 40 |
| 1889 | 30 | 20 |
| 1891 | 50 | 20 |
| 1893 | 65 | 40 |
| 1895 | 85 | 55 |
| 1897 | 20 | 30 |
| 1899 | 5 | 5 |
| 1901 | 5 | 10 |
| 1903 | 50 | 20 |
| 1905 | 55 | 70 |
| 1907 | 40 | 30 |
| 1909 | 30 | 20 |
| 1911 | 80 | 30 |
| 1913 | 50 | 40 |
| 1915 | 10 | 40 |
| 1917 | 5 | 30 |
| 1919 | 10 | 5 |
| 1921 | 80 | 10 |
| 1923 | 50 | 40 |
| 1925 | 10 | 60 |

1. When were the 2 highest populations of snowshoe hares?

2. When were the 2 highest populations of Lynx?

1. What went up first, the hare or the lynx population?
2. When the Lynx population began to get bigger, why did the Hare population drop?
3. What other natural things in the ecosystem could effect Lynx and Hare populations (other than humans)? List as many as you can and indicate + or – for how it would effect the number of individuals.
4. Give an example of a predator prey relationship in Pennsylvania.

7. How do humans interfere with predator prey relationships? List as many as you can and indicate + or – for how it would effect the number of individuals.

8. “Wildlife Biology” did not exist during the 1800’s. Where do you think we got the data for Hare and Lynx? (Hint: Where did we get our Shad data?)