1. Skim the Inouye et al. (2010) PNAS article <http://www.pnas.org/content/97/4/1630.full.pdf> (10 minutes). It is OK if you do not understand all of the words. What words do you see mentioned a lot that may be new to you? List 5 words you see in the paper more than once that you do not know. List them and add them to the word cloud. We will work through them together.
2. Look at all of the figures. List the independent and dependent variable of each. Make a short title for each graph that tells us what relationship is being compared – they are all scatterplots with trend lines. Answer the following questions based on the figures.

|  |  |  |  |
| --- | --- | --- | --- |
| Figure | Independent Variable | Dependent Variable | Description of relationship |
| Fig. 1 |  |  |  |
| Fig. 2 |  |  |  |
| Fig. 3 |  |  |  |
| Fig. 4 |  |  |  |
| Fig. 5 |  |  |  |
| Fig. 6 |  |  |  |

* 1. Is snowfall increasing or decreasing in Gothic?
  2. Do the plants flower sooner or later when the ground is bare early in the year?
  3. Are Robins showing up earlier or later now than in the past?
  4. Are marmots coming out of hibernation earlier or later?
  5. The temperature of what month was found to affect when marmots come out of hibernation?
  6. Was there more or less snow on the ground when marmots emerged in recent years compared to the 1980s? Why might that be important? List what marmots eat.

1. Write a short story of how things are changing on this one mountain. Include the term **phenology**.