

## Student Pages: Group Activity

### Polar Bear Science Team 2



For this activity, your group is the "Polar Bear Science Team 2". Your team is responsible for reading the scientific paper called "Effects of Climate Warming on Polar Bears: a Review of the Evidence".

Step 1: Download this scientific paper from the Bear Trust International website:  
<http://beartrust.org/polar-bears-of-summer-2>

Step 2: Read this entire paper, but don't get bogged down in any statistical methods.

Step 3: As a Team, create a power point presentation about this paper that you will be giving to the rest of your class.

In this presentation, make sure to include AT LEAST the following:

1. Who were the authors of this paper, in which journal was this paper published, and in what year was this paper published?
2. When was this study done?
3. What have polar bears historically eaten?
4. When were the effects of global warming first recognized?
5. Where would the effects of global warming first become apparent?
6. Historically, how long did polar bears in western Hudson Bay fast?
7. Why is it a concern that the length of the ice free period is increasing?

8. Where do female polar bears have their maternal dens (where do they make dens for birthing?)
9. How might global warming affect polar bear dens?
10. How much earlier is the ice breaking up in Hudson Bay?
11. Look at Figure 3 in this scientific paper. It's the same figure you created as part of Activity 2 in the "Student Pages: Individual Activities". In your powerpoint presentation, include the figure you created that looks like Figure 3 from this paper. Describe what this Figure shows; make sure to talk about the trend line and the slope.
12. How does the extended duration of the ice-free period correlate with polar bear body condition, weights, and survival? What does this mean for polar bears long term?
13. Why is the extended ice-free period especially hard for pregnant polar bears?
14. In some places, there has been increased human-polar bear interaction. Does this necessarily mean that polar bear populations are increasing? Why or why not?
15. Summarize the "Conclusions"

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