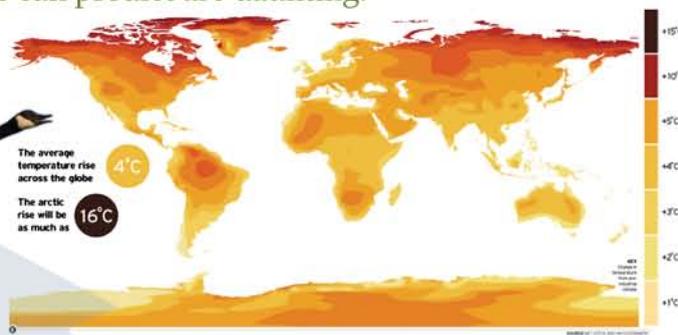




Last week, Punxsutawney Phil, the "Prognosticator of prognosticators," emerged from his burrow shortly after 7:20 a.m. He "told" us spring would be coming early after not seeing his shadow. Luckily Phil's accuracy is only pegged at 45%, because while it may sound refreshing after a cold winter, early springs due climate change are causing all kinds of problems

## We're just warming up...

Climate change involves major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer. Factors that can shape it include changes in solar radiation or the Earth's orbit, shifts in earth's tectonic plates, and changes in greenhouse gas concentrations. While Earth's climate changes naturally over time, the focus now is on the 'human factor.' According to the United States National Research Council, "...there is a strong, credible body of evidence, based on multiple lines of research, documenting that climate is changing and that these changes are in large part caused by human activities." The planet is changing, and in a lot of ways it's our fault. We really don't know what all of the effects will be, but the ones we can predict are daunting.



Recent mild winters have disrupted hibernation patterns for many species. In England, confused hedgehogs gave birth late. As a result, their pups did not have time to put on sufficient weight to hibernate successfully and are starving. Researchers in Spain announced that some European brown bears have stopped hibernating altogether. Many bird species are migrating earlier and arriving in environments not prepared to accommodate them. Rocky Mountain Yellow-bellied marmots are emerging from hibernation early to find their high meadows still covered by snow. At that point, they either starve or are eaten by predators.



And it's not just distant animals that are affected, either

A 2012 study in Zion found a significant shift in habitat and probable loss of three of the four local species they looked at (contact RM for more details). Campers taking advantage of warm weather in Glacier NP, converged on campgrounds that weren't opened or staffed for the season yet. Droughts & crazy weather patterns like Storm Jonas affect millions of people. There are even theories that being warm all the time is contributing to our obesity problem as it changes our metabolism. Moral of the story? Climate change is happening, & it affects every one of us.

### So What Can We Do About It?

Some of the impacts we've had on the planet are already irreversible. But everything we do to reverse the trend will help limit the effects.

- \* Use Less Energy
- \* Reduce, Reuse, & Recycle
- \* Drive Less
- \* Drive Smarter
- \* Eat Smarter
- \* Spread the Message!



Zion's Green Team is on a mission to save the world, literally! And we need your help.

Ideas? Contact Lisa @ ext 630 or [Lisa\\_M\\_White@nps.gov](mailto:Lisa_M_White@nps.gov)