

The Science of Climate Change

September Homeschool Class at Cedar Creek Ecosystem Science Reserve

Climate change, global warming and climate science are topics that are in the news a lot right now. Is the planet warming? Are changes we observe in rainfall, temperature, storm patterns and more caused by humans or part of a nature cycle? If the climate IS changing, how does that impact Minnesotan plants and animals? Come learn about how scientists study climate and climate impacts!

Cedar Creek is home to several long-term experiments that manipulate important climate and global change variables including water, temperature, nutrients and diversity. Today's class will include a mix of indoor instruction, outdoor investigation, visits to long-term experiments and science games. Come prepared to learn lots and have a great time!



By the end of the day, students will be able to:

- Investigate how temperature increases impact and change atmospheric conditions.
- Demonstrate the greenhouse effect by showing how carbon dioxide and other greenhouse gases in the atmosphere trap heat and insulate the Earth.
- Distinguish between the greenhouse effect and climate change.
- Develop a better understanding of the carbon cycle.
- Compare pre-industrial and post-industrial carbon cycles.
- Investigate how carbon sequestration in trees and forests helps reduce carbon dioxide in the atmosphere.
- Examine some of the issues associated with carbon sequestration.
- Describe how scientists study climate change in a field setting.
- Explain ways people might help plant communities deal with climate change.