

## Resource Review from 2016 Climate Change Course in Denali National Park

NPS - Alaska State of Change

[https://www.nps.gov/akso/nature/documents/State-of-Change\\_Final\\_August-2014.pdf](https://www.nps.gov/akso/nature/documents/State-of-Change_Final_August-2014.pdf)

### Topics:

- Impressions of the park
- Glaciers
- Permafrost
- Fires
- Implications on climate change
- Native History/traditions/communities
- Other park areas and locations in Alaska
- Ocean acidification
- Sea Ice

### Review:

- Could be used with middle levels on up (7<sup>th</sup> grade +)
- Not too difficult
- Use as a jumping off point for future discussions
- Might need background on global warming

Denali National Park Junior Ranger Booklet

<https://www.nps.gov/dena/learn/kidsyouth/beajuniorranger.htm>

### Review:

- Pre-learning activity for any student (a grounding point)
- Great for lower reading levels
- Has a range for everyone & shows where/topics
- Pre-teaching tool – talks about collecting data.
- Nice transition piece to more detailed work.
- What can be done about it (change), examples at the end
- Good resource
- Good for comparing your local parks, suitable to use in “parks in every classroom” initiatives.

Teaching Kids to Love the Earth

<https://www.amazon.com/Teaching-Kids-Earth-Marina-Herman/dp/0938586424>

- Book broken into 5 segments
- Each section starts with a story
- 2<sup>nd</sup>-6<sup>th</sup> grade students
- after each story there is an associated activity
- while section on following up on curiosity & mini lessons

- some teacher led
  - some student led
- focuses on plant-, human-, animal- interactions

#### Down to Earth Guide on Global Warming

<https://www.amazon.com/Down-Earth-Guide-Global-Warming/dp/0439024943>

- Four chapters, broken down into different aspects on global warming
- Does get into some of the science of climate change
- Has subcategories of topics that could be used in class as lead in to other activities
- Has some jokes
- Has resources but not all research is cited in the book.
- 3<sup>rd</sup>-5<sup>th</sup>; reading not hard – read aloud lots of teaching along the way.

#### Watching Weather our Way

<https://www.arcus.org/publications/wiwow>

- Good stories
- Good choice for students to get started on research projects
- Moral approach to climate change
- Quirky – dictionary of ice, sea ice, etc.
- Not appropriate for a whole class assignment but rather a resource
- Appropriate for high school level learners

#### This is My Planet: A Kids Guide to Global Warming

<https://www.amazon.com/This-My-Planet-Global-Warming/dp/1897349076>

- Huge section on the polar regions
- Good ending! With a positive message to kids
- Scientists are right each one of us is a little responsible for global warming
- Has tips on how to “help” including eating lower on the food chain
- Harder for 1<sup>st</sup> graders – might break up reading into sections to better manage the content
- 3<sup>rd</sup> grade read-aloud activity
- 5<sup>th</sup> grade appropriate

#### Why Are Ice Caps Melting?...the Dangers of Global Warming

<https://www.amazon.com/Why-Caps-Melting-Lets-Read-Find-Out/dp/0060546719>

- The title is a bit alarming
- Might not read entirely but share parts visually
- Talks about scientific aspects and brings it back to a student level. It gives examples of change and how students might notice change in their world.

- Good starter for discussions
- For music – it could be a good grounding activity and in discussion it will tie to other subjects – kids could do a role play and/or listen to music to help tell a story
- There could be vocabulary issues for lower grades. Use in 2<sup>nd</sup> grade on up.

#### A Clean Sky: The Global Warming Story

<https://www.amazon.com/Clean-Sky-Global-Warming-Story/dp/1880599821>

- Incorporates science in a non-fictional manner
- A very approachable book
- Good reading on greenhouse effect
- 5<sup>th</sup> grade – read alone
- Neat artwork and key words. Art brings out the beauty of nature
- Love the glossary! Ties back into the climate change and activities.

#### Various Scientific Papers on permafrost & fire, as a resource for classrooms

- Use research papers in class
- Scientific papers are different to read, may need instruction on how to tackle them
- Use them to follow discussions on “what we know”
- Talk about methods section in papers, discuss what they are doing & observing
- Managers have satellite images and digital images to look at patterns – a good visual for students
- Papers talk/show the “messiness” of science & that it is not as simple as what is shown in papers
- Use complex science to break down & ask questions
- Could use data in class & talk about it