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U.S. Department of the Interior

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Research and Education Center  
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## Congaree Sings

# The Climate Change Song

by Dr. David C. Shelley and Chris Ramaglia

### About the Song

This song is intended as a broad overview of climate change for a variety of audiences. It has evolved over the years in tandem with climate change programming at the NPS Old-Growth Bottomland Forest Research and Education Center (OGBFREC; <https://www.nps.gov/rlc/ogbfrec>) at Congaree National Park (<https://www.nps.gov/cong>) and in close connection with the Earth to Sky program, a NASA-NPS-FWS partnership focused on science communication (<http://earthtosky.org>). Many thanks to all those who have listened and responded and supported this effort!

Within the text below, apostrophes precede the syllable of the first strong downbeat of each line. A few lines also require triplets to maintain the cadence. Like some traditional ballads, the entire song may be too long and to be sung or absorbed all at once. The song is divided, however, into several parts so that folks can select verses as appropriate. The parts include (1) ***Part I: Definitions*** [verses 1-3], (2) ***Part II: Effects*** [verses 4-6], (3) ***Part III: Science*** [verses 7-9], and (4) ***Part IV: Responding to Climate Change*** [verses 10-18; verses 10-12 are "*IVa: So Now What?*," verses 13-15 are "*IVb: Start Small*," and verses 16-18 are "*IVc: Think Big*"].

The melody for the climate change song was adapted from "I'll Twine Mid the Ringlets," which was published in 1860 with music by J.P. Webster and words by Maud Irving. The original tune was hugely popularized through an adaptation recorded as "Wildwood Flower" by the Carter Family in 1928. Today "Wildwood Flower," is a canonical standard in the old-time / Southern Appalachian folk music repertoire. The tune is used here in accordance with the United States Copyright Office, which notes that "...all works published in the United States before January 1, 1923, are in the public domain." (<https://www.copyright.gov/circs/circ15a.pdf>).

Dr. David C. Shelley has served as the OGBFREC education coordinator since 2006, and has participated in the Earth to Sky partnership since 2010. Chris Ramaglia worked at Congaree National Park as a resource education ranger and a University of South Carolina Masters of Earth and Environmental Resource Management student from 2010 to 2012.

As of 2016, generous support from the NASA Earth Science Division is helping to develop music videos for Parts I, II, and III of the song. Other Earth to Sky partners continue to work on a video presentation of Part IV (Responding to Climate Change). The lyrics below have been edited very slightly after audio recording in the summer of 2016.

Individuals are invited to fit the words to other tunes or rhythms that may suit your audience. Please feel free to share recordings or performances through the earth to sky website (<http://earthtosky.org>) or [david\\_shelley@nps.gov](mailto:david_shelley@nps.gov).

**CHORUS**

Climate 'change is real, it's happening around the  
world today.

Its effects are measured, seen, and felt in many  
different ways.

And no 'matter what we'd like to wish, pretend, or  
just ignore,

We've got 'lots to learn and do—hey now that's  
what this song is for.

**Part I: Definitions**

Verse 1: So we've 'all heard of climate change, but what  
now does that mean?

Perhaps ex'plaining terms would be a place to start so it  
should seem.

You see now 'climate is not weather. Do you know the  
difference yet?

Mark Twain said, "Climate is what you expect, and  
weathers what you get."

Verse 2: Weather 'does describe the scene outside any  
time of day or night.

Is it 'sunny, cloudy, windy, raining, hot, cold or just right?  
Weather 'changes day and night and from each season to  
the next.

But the 'climate is the natural range of change that you  
expect.

Verse 3: The limits 'of the climate are outlined by weather  
extremes,

Things like 'heat waves, cold snaps, droughts and storms of  
all varieties.

Well, one 'heat wave, by itself, it doesn't mean a thing, my  
friend,

But now 'nine heat waves in ten years sure do make a  
climate trend. CHORUS

**Part II: Effects**

Verse 4: A changing 'climate means life's rhythms beat  
quite unpredictably.

If living 'things can't cope, adapt, or move, then they will  
die, you see.

So now the 'plants don't know just when to grow green  
leaves or flowers blue,

And ani'mals must struggle to find new homes and food  
and water too.

Verse 5: Living 'things don't just adjust to climate change  
all by themselves,

So the 'landscape, soil, and water cycle must adjust as well.

Because the 'climate drives how rivers rise to flow and  
shape the ground,

And how 'glaciers melt and sea level does rise the world  
around.

Verse 6: Climate 'change does also impact humans and  
society,

How our 'populations find resources and security.

Public 'health, globalization, infrastructure, public lands,

Poverty, com'merce, and energy and are some issues at  
hand. CHORUS

**Part III: Science**

Verse 7: Scien'tists who study this methodically use  
observations:

Satel'lites, tree heights, ships logs, ice cores, bird flights,  
deforestation,

Also 'coal mine yields and soybean fields, plankton and  
models, too...

And 'then after they analyze, their work gets peer  
reviewed.

Verse 8: Now it's 'true that through the Eons climate  
changes naturally,

But many 'lines of scientific evidence do all agree,

And the 'science clearly shows the recent scope and rate of  
change

Are nothing 'like Earth has seen before and well beyond  
the normal range.

Verse 9: This recent 'climate change is caused by burning  
fossil fuels, yes.

Burning 'gas and oil and coal does make our atmosphere a  
mess.

Greenhouse 'gasses, largely CO<sub>2</sub>, are building up in place,

Trapping 'heat from sun's rays that once was reflected  
back to space. CHORUS

## Part IV: Responding to Climate Change

### Part IVa: So Now What

Verse 10: Well in ‘some ways ain’t it great that Mother  
Nature’s not to blame?

If we were ‘powerless, then all this mess would be a  
different game.

But if we ‘are to blame, then we can change, and act strong  
in defiance—

Through mitig’ation, adaptation, communication, and  
good science.

Verse 11: Good science ‘means we must support and use  
good research all around,  
Data’sets, analysis, and models peer-reviewed and sound.  
Communi’cation means engaging folks takes thought and  
work and care  
To inform and ‘inspire long-term choices that are just and  
fair.

Verse 12: Adap’tation means that for some changes, we  
must plan to cope.

Miti’gation means we reduce greenhouse gasses around  
the globe.

If climate ‘change was sinusitis, if not something more  
exotic,

Adaptation’s ‘rest and Tylenol, mitigation’s the antibiotic.

### CHORUS

### Part IVb: Start Small

Verse 13: Well this ‘all may seem quite daunting, and in  
some ways that is true,  
But we’ve ‘got to hope we’ve still got time to change the  
things we do—

Things like ‘how we choose to use our water, stuff, and  
energy,

And think a’bout all that we waste and what we throw  
away, you see.

Verse 14: So main’tain your car, don’t drive to far,  
consolidate your trips,

Weather’ize your house, adjust your thermostat, and fix  
your drips,

Insu’late your water heater and do turn it down a bit,  
Expand the ‘margins and use both sides of the paper when  
you print.

Verse 15: Use e’lectricity efficiently, and unplug things  
when you’re done.

Fill the ‘washing machine and dishwasher quite full before  
they’re run.

Think on ‘what you buy and where it’s from and how it’s  
boxed or wrapped.

To re’duce your trash re-use, recycle, and compost your  
scraps. CHORUS

### Part IVc: Think Big

Verse 16: Now it’s ‘true these little things we do add right  
up from the start

To make a ‘total whole that’s bigger than the sum of all the  
parts,

But if we ‘don’t just stop... [pause]... right there and grow  
complacent and lazy

We can think ‘bigger yet and get engaged through civics  
now you see.

Verse 17: Find out a’bout your rights and options to  
contribute and comment

For plans and ‘meetings and reviews of policies and  
documents,

So our ‘long-term health and wealth is truly responsible,  
you see,

With some ‘sense and balance of climate accountability.

Verse 18: So get out’side, engage yourself, your work,  
voice, heart, mind, time and hands.

Take good ‘care of your local community, the people and  
the land.

Doing ‘this will cultivate true hope and really show your  
brilliance,

Because ‘healthy land and people have true climate change  
resilience. CHORUS