

My Climate Story

Recipes for Crafting, Telling,
& Sharing Your Own

Author: Wiggin, Bethany
Cooper, Danny
Hardy, Connor
Ogbemi, Tsemone

Designed by: Faranda, Angela

Contribution by: D'Avanza, Mia

Illustrator: Powell, Elle

ISBN: 978-0-578-34437-9

Publication Date: Dec 2021

Publisher: Penn Program in Environmental Humanities, Philadelphia, PA

Book Format: Paperback

How to cite this work:

Wiggin, Bethany, Danny Cooper, Connor Hardy, and Tsemone Ogbemi. *My Climate Story: Recipes for Crafting, Sharing, and Telling Your Own*. Self-published, Penn Program in Environmental Humanities, 2021.

This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA

You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

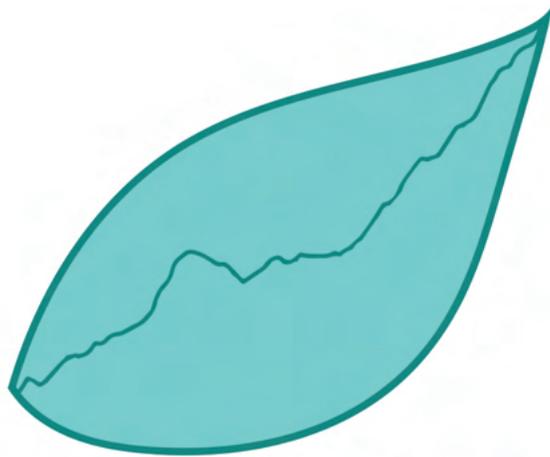
No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Notices:

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.





MY CLIMATE STORY

a project by  PENN PROGRAM IN
ENVIRONMENTAL HUMANITIES

www.ppehlab.org



DEDICATIONS

BW

For my students who teach me to refuse 'business as usual'

CSH

For my family, who taught me to notice the world around me by
watching creatures with wings
Binoculars, bird books, feeders

DC

I'd like to dedicate this workbook to a species I love - the Eastern cottontail rabbit.
I've watched this resilient rabbit respond to a shifting habitat throughout my life
and think we can all take inspiration and learn to look to other creatures as we
adapt to our changing climate.

AF

To the artists and storytellers who show us what's possible

EP

To my father, who has dedicated his life to fighting climate change, and who
instilled in me a deep love of nature

MD

I dedicate this workbook to the American alligator, *Alligator mississippiensis*,
which really gets a pretty bad rap.





CONTENTS

INTRODUCTION

page 1

HOW TO TELL CLIMATE STORIES BEYOND HUMANS

page 8

HOW TO TELL YOUR CLIMATE STORY

page 18

HOW TO MAKE CLIMATE CONVERSATIONS

page 28

CLOSING

page 44

HIGHLIGHTED + ADDITIONAL RESOURCES

page 46

AUTHORS + CONTRIBUTORS

page 72





Welcome to *My Climate Story*, a public research project to document and share how we're experiencing climate change, and how these changes are making us feel.

This workbook introduces a set of tools to explore, document, and share how global climate change is impacting *your* life and *your* environment--the people and places around you.

Why do we want to hear *your* climate story?

We'll start with the bad news. Global warming is already written into history. Since the 1880s, humans' use of fossil fuels has raised the average global temperature by about 1.8 degrees Fahrenheit or a little more than 1 degree Celsius. That seemingly small rise is bringing big changes, weird weather, and extreme storms. Making matters worse, temperatures in more recent decades are rising increasingly fast as we pump more carbon into the atmosphere. Climate impacts show up in our lives in obvious and sometimes terrible ways, often close to home.

But there's good news too. Since humans have caused climate change, we can also address it. Tackling such a big problem requires lots of solutions. And while there is no single silver bullet, climate remedies are all around. From switching to green energy to educating ourselves about climate and environment and holding policy makers accountable, these remedies are scaling up.

The mission of the MCS project is to promote climate literacy and support individuals and school communities to recognize ourselves as climate actors and change agents. So while we can't stop our climate from changing, we can certainly act--individually and together--to make the changes a lot less awful.

MCS puts tools for positive change in your hands, connecting you with a climate literacy curriculum that spans the arts and sciences and with a network of students and educators who are documenting climate change impacts and learning to act at the local, state, national, and global levels. As part of this public research project based in Philadelphia and supported by the University of Pennsylvania, you'll be able to

- contribute climate data to the project's interactive climate "storybank"
- develop short and long-form climate stories
- transform your learning space into a climate classroom
- interact across the project network of climate storytellers
- share multi-media climate stories with educators and policy makers.

Why is *your* climate story important?

As inhabitants of a planet under pressure from human actions, we can't help but be impacted by climate. The recognition that global climate change affects each of us locally, even personally, lies at the heart of MCS and of climate literacy more broadly, and it offers a first step toward climate resilience. Learning to see and understand how climate change is changing lives provides the basis for

Introduction

your individual climate story. Maybe it will be a big story, maybe small. Either way, *your* climate story provides a thread in the complex story of global climate change.

The science of climate change is well understood, but its local and personal impacts are not. With *My Climate Story*, we aim to change that. Teachers, parents, and students across the globe want schools to teach climate change. And as we learn to recognize how climate change impacts so many facets of our world, we also need to create a climate curriculum that spans science and art. Science alone is not enough, especially since we've seen that science literacy fails to predict a person's willingness to act on climate. The courage and determination to address climate change may depend primarily on culture: our shared beliefs and worldviews. Shared climate stories can create cultures of climate resilience. We're so glad to welcome you to *our* Climate Story.

Climate change is not only for science class

Poll after poll show that students, parents, and teachers want more and better climate education. Leading environmental educators point to the need for a multidisciplinary approach. Climate artists and authors are getting creative, helping us both to understand what's happening and to imagine more just and renewable futures. In other words, climate change is not a topic only for the science classroom. So while we definitely hope that MCS tools can be useful in the science classroom, we're also excited to see how they're being picked up by teachers and students in English, art, and social studies too.

Mark Hoff teaches social studies in a high school near Philadelphia, and he has shared his Climate Story in the project's first documentary. For him, MCS is effective because of its power to translate global change on a personal scale, "We're trying to find that empathy piece, why it matters." In MCS workshops for his students, he explains, "We try to make the connection of where people live, how they ended up living there, and how the current environmental situation is impacting them and how we project that into the future."

Another MCS teacher and Storyteller, Lisa Yuk Kuen Yau, a fourth grade teacher in Philadelphia, has told us, "We talk about global warming and climate change like it's far out there." With MCS, she helps her students "bring it to their own environment and what they know." Her fourth graders are scientists and storytellers: "By observing, you're really participating in studying science, and by telling your own story about climate, you're inventing a new way of looking at the world."

High school biology teacher and Climate Storyteller Chris Sikich unpacks the power of the Climate Story, "The little picture is just to key into what [students] understand about themselves, their local world, their local community, about what they want to stay constant, and what they don't want to change." He's a science teacher who embraces the power of personal story, "Even if it's not initially connected to climate, there's always a way to bring it back." Climate Stories bring abstract concepts home.

Teachers, Parents, and Students Want Climate Education

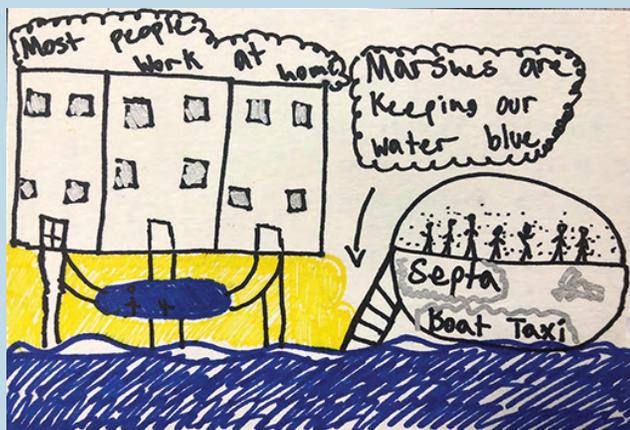
Amidst Covid-19, the United Nations Development Program or UNDP distributed questions about climate change, education, action, and policy through ads on mobile games. More than 1.2 million people from 50 countries answered and produced the largest survey on public opinion ever, called “The People’s Climate Vote.” Across those 50 countries, 64% of participants classified climate change as an “emergency.”

Another 2021 poll, conducted by the Pew Research Center in the spring before a summer of devastating wildfires and floods, surveyed 18,850 adults in seventeen “advanced” economies and found rising levels of concern about the personal effects of climate change and an increased willingness to make life changes to ameliorate impacts. Fully 34% said they would consider “a lot of changes” to daily life as a response to climate change.

See sources
and learn more in
Highlighted Resources,
starting on
page 47!

Pew also conducted polls in 2020 and 2019. Participants worried about the future--but they also saw climate change now as a matter of serious concern, “a median of 70% across 20 publics surveyed said climate change is affecting where they live a great deal or some amount.” In a 2018 Pew poll conducted in 26 nations, majorities thought global climate change was “a major threat to their own country.” The same held true across fourteen countries surveyed in 2020.

Poll after poll shows young people to be more concerned about how climate change is impacting and will impact their lives. In the United States, a whopping 65% of the youngest participants (ages 18-29) reported that they were “somewhat or very concerned” that global climate change will harm them personally.



An eighth-grader’s vision of a warming but resilient Philadelphia in 2100. Created as part of PPEH’s Futures Beyond Refining catalog of postcards available at ppehlab.org/experiments/futures-beyond-refining

A poll conducted by Yale/George Mason ahead of the 2020 US elections found surprisingly broad consensus across party lines that climate change was a “very serious” or “somewhat serious” problem. Majorities in both major political parties supported American involvement in the Paris climate agreement and its pledges to reduce carbon emissions and restrain global warming to 1.5 degree Celsius over pre-industrial levels. 8 in 10 Democrats supported an ambitious Green New Deal, as did 4 in 10 Republicans.

Introduction

How can you tell & share your climate story?

Climate change can be hard to talk about. Sometimes it seems abstract, impersonal, and far off. Sometimes it's happening way too close to home--and that's especially hard. MCS tools and workshops help you make it personal and offer you community for when it's tough. Whether you are in the 6th grade, teach 6th graders, or are a 16th or 66th grader, you will find tools here to recognize, tell, and share your climate story.

The tools and tips in this workbook are presented in four short chapters and introduce you to different kinds of climate stories. The first chapter encourages you to explore nonhuman stories and to document how climate change impacts plants and animals. The second chapter guides you to research, tell, and share your own climate story. The third teaches you to conduct climate conversations and climate interviews. The fourth lays out how to host your own MCS workshop. Each chapter has accompanying slides, activities, and resources.

With your permission, your stories will be included in the MCS "storybank," a growing collection of personal stories about climate change. They're searchable by location, climate impact, and species, and they offer a compendium to the measurements and numbers we usually use to talk about climate.

Treat this book like a cookbook!

The tools and tips in this book work like recipes for making climate stories. And, just like food, they're even better when shared. In each chapter, we suggest a short set of ingredients and a few cooking steps, but the measuring, stirring, and time over heat is up to you. You might try a story recipe more than once. As you return to a recipe for climate stories, we imagine you might add a little less sugar or a little more salt. If it works really well, write that down on your recipe card and let us know. We'll thank you--and include your tips in future editions of this workbook.



Maybe researching and telling your climate story will get you thinking about our collective climate story--in your school, or maybe your town or city, or across a whole region, even the planet. At the time we're writing this note to you (in October 2021), over two hundred climate storytellers have shared their climate story to our shared storybank. We hope you will put yours there too. As part of the storybank, your story will provide students and teachers tools for understanding climate change's diverse impacts and provide the personal stories so crucial to communicate with policy makers.

Most of the activities this cookbook presents can be done by yourself or in a group. To make climate conversations and conduct interviews, you'll need at least one partner. Each chapter is

based on a workshop that the Penn MCS team (also the co-authors of this workbook) play-tested in twenty on-line workshops and events held amidst the Covid-19 pandemic for participants from the sixth grade through life.

The team at the Penn Program in Environmental Humanities (PPEH) is also standing by to help you with MCS. Write to us at director@ppehlab.org or message us on social media. We offer free live workshops in both formal and informal settings, and we're supporting educators to create networked climate classrooms. We want to hear from you, and we want to know:

What's Your Climate Story?

TO BE CLIMATE LITERATE IS TO UNDERSTAND



The planet is warming because humans are loading the Earth's atmosphere with CO₂. This carbon pollution directly results from human economic activities fueled by carbon-intensive energy sources (fossil fuels).



Humans are causing climate change, but of course humans can also switch to clean energy and fuel. After all, we've only been using fossil fuels intensively for a relatively brief span of human history, since about 1800.



Regions and countries which adopted carbon-intensive fuels first remain the largest sources of carbon pollution.



Climate change's cruel irony is that it most severely affects those who bear the least responsibility for it. The climate crisis unjustly affects communities around the globe and in the United States.



Climate change is forcing climate migrations, of humans, animals, and plants.



Fossil fuel companies have borrowed from Big Tobacco's playbook to fuel a powerful climate illiteracy campaign.



Increasing CO₂ levels in the atmosphere are also soaking into the oceans. They have already become 30% more acidic; ocean life from the coasts to the deep are greatly affected.

AND GRAPPLE WITH SOME BASICS



Increasing temperatures are melting ice caps and glaciers around the world, fundamentally changing the cryosphere and unleashing powerful knock-on effects.



Climate change is causing “wacky weather” and transforming hydrological systems and wildfire seasons.



Animals, including humans, as well as plants, including crops, are suffering and dying from heat stress.



Humans must end “business as usual” in order to curb global warming.



The United Nations tries to coordinate nation-states’ emissions reductions. Its Framework Convention on Climate Change (UN-FCCC) was signed in Rio in 1992 at the “Earth Summit.” The Framework’s highest decision-making body, the Conference of the Parties (or COP), convenes annually. Despite its efforts, the world is “on a catastrophic pathway to 2.7°C of heating,” in the words of UN Secretary General António Guterres in September 2021.

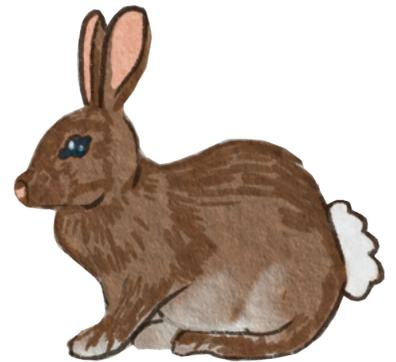


Individual actions are a good way to build individuals’ climate literacy, and collective actions taken at scale offer the best strategy to create liveable futures.

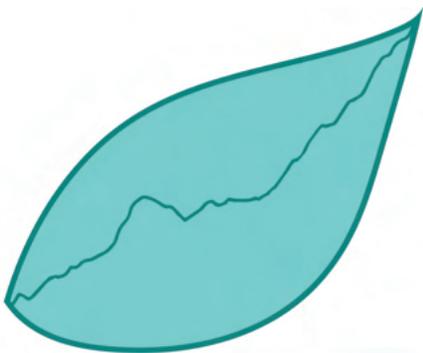


Sometimes we talk about climate change as if it's looming off in the future, even though we know that climate impacts are wreaking havoc around the world now. In 2018, California experienced its most deadly wildfire in the state's long history of fire. Whole towns were destroyed--Concow, Magalia, Butte Creek Canyon, and, in a terrible irony, the town named Paradise. 85 human lives were lost in that fire. Increased and more intense wildfires indicate a changing climate. They are fueled by drought which, in turn, is another symptom of climate change. It's like a terrible disease, one brought on by human behavior. Today, as more and more people realize that our carbon habit is fueling planetary disease, we're also working for a cure. The surest remedy is to quit carbon and create healthier, zero-carbon habits fast.

We humans are far from the only creatures who are feeling the impacts of this planetary disease. Stories of pets--dislocated, injured, or killed by fire--are incredibly sad. Animal advocacy organizations estimate an "inconceivable" number of wild animals lose their lives every year in climate-fueled wildfires. Three billion wild animals died in Australian bushfires, just in 2020. Humans caused this raging disease called climate change, and now animals, plants, and millions of other organisms that make up our environment suffer from it too.



Humans, or human-sized ecosystems, are one part of an interconnected web of life. We are incredibly interconnected. In fact, we humans actually host many species within our bodies. Maybe we should call ourselves human-sized ecosystems! Scholar Donna Haraway notes that "immense irreversible destruction is really in train, not only for the 11 billion or so people who will be on earth near the end of the 21st century, but for myriads of other critters too." We suggest we can take up her call to "make kin" with the countless creatures with whom we share the Earth. Making kin starts with understanding the species around us--and considering their climate stories too. This chapter teaches you how to write a climate story beyond human perspectives and immediate concerns.



MY CLIMATE STORY

At the Penn Program in Environmental Humanities (PPEH) in Philadelphia, we began the MCS project before Covid-19, by asking humans to share their climate stories, i.e., how they are sensing--seeing, smelling, feeling, even tasting-- climate impacts in places they love, and how those changes are making them feel. Soon after we started testing early tools for eliciting climate stories, we had to isolate amidst the pandemic's early stages. Like so many, we turned to the natural

How to Tell Climate Stories Beyond Humans

world for solace and even companionship. Naturally, we immediately wanted to know: *How is climate change affecting the other creatures around us? Has the range of the mosquitoes biting our arms shifted north? Did this wildflower always grow here?* To get the full picture of climate change, we decided to follow naturalist Aldo Leopold's call to "think like a mountain" and consider every aspect of the ecosystem on a timescale larger than our individual lives. One Covid silver lining was that it prompted us to extend climate stories beyond humans.

The *Beyond Humans* storytelling tools also help to introduce the MCS project to younger storytellers. The storytelling tools you'll learn about in the next chapters ask participants to consider how we can sense climate change in our life and surroundings, in our own bodies and where we live. But young people are just too young to be able to register climate changes. Of course, they know the weather, but their lives are still too short to be able to see or otherwise sense the longer term changes that document the changing climate. Younger climate storytellers can, on the other hand, identify plants and animals which they might feel connected to--actually, they're super good at that. They can then do guided online research to learn how "their" critters might be experiencing climate change. Framed in stories of familiar creatures, climate change becomes tangible and meaningful.



Artist: Peter Wiggin Helgerson, age 8

But participants of all ages might choose to begin the MCS curriculum with stories *Beyond Humans*. Climate impacts can be bleak. By first researching and telling a climate story *Beyond Humans*, storytellers of all ages can move more slowly toward their personal story, better prepared to cope with the complex and hard-to-process emotions that may bubble to the surface. Confronting climate change is hard-- but that doesn't mean we shouldn't talk about what's going on and try to slow this terrible disease.

Through this first storytelling exercise, you will consider key concepts, including climate versus weather, explore how the climate is changing differently in different places, and actively learn how climate change is affecting a number of species beyond humans. You can do these exercises on your own, or, if you're an educator, you might choose to lead a group workshop on *Beyond Humans* climate storytelling (a topic you can learn more about in chapter four). Either way, you'll leave the exercise with some invaluable skills beyond climate literacy: how to tell a story, how to do online research, how to process complex feelings, and how to feel kinship with the vast world beyond humans.



Recipe for a *Beyond Humans* Story



- Step 1** We recommend starting every writing exercise, whether you're working alone or in a workshop, with a brief consideration of why you're writing a climate story. What brings you to this work?
- Step 2** If you're facilitating a workshop, don't forget to set group norms before posing questions to break the ice.
- Step 3** Before diving in, consider some basic information around climate and climate change. Whether you're working alone or leading a group, you can read on and review these topics in our workshop slide deck. (See Highlighted Resources, page 60)
- Step 4** Consider some metrics of local climate impacts.
- Step 5** Grapple with the metrics of species loss.
- Step 6** As you move into the next steps of crafting a story, you can use a *Beyond Humans* worksheet to help you stay organized. You can also fill out our online *Beyond Humans* form for inclusion in the climate storybank.
www.my-climate-story.org
- Step 7** Get out your S-I-S-Rs (scissors).
- Step 8** Further reflections on your research: What does it all mean?
- Step 9** Share your story!

Keywords: Anthropocene, biodiversity, habitat loss, species loss

Recipe Notes for a *Beyond Humans* Climate Story

1. We recommend starting every writing exercise, whether you're working alone or in a group workshop, with a brief consideration of why you're writing a climate story. What brings you to this work?
2. If you're facilitating a workshop, don't forget to set group norms before posing questions to break the ice.

A good **group norms** statement lets participants know what is expected of them in terms of participation, while also making it clear that they can take breaks or opt-out whenever they need to. Here's a sample group norms statement we've used many times in recorded online workshops with high school students: *We encourage those of you who can to participate in this workshop with your cameras on. At the same time, we recognize that this may not be possible for everybody, for a variety of reasons: screen fatigue, bathroom break, things going on in the background. If you have any issues, please feel free to private message one of the workshop facilitators.*

Icebreakers put participants at ease. They can be especially helpful with younger audiences, like schoolchildren, but they tend to work on everyone! Choose your questions to break the ice to match your audience, your location, the season, recent news events, etc. For older audiences, you might begin with a general question and then connect it to local climate impacts.

-
3. Before diving into the storytelling workshop activities, establish some background information around climate and climate change. Whether you're working alone or leading a group, you can read on and also review these topics in our workshop slide deck.

One of the most important distinctions to be made before telling climate stories is the difference between weather and climate. These definitions can be tricky! The key difference between the two is their duration: weather is short-term and climate is long-term. Simply put, weather represents the state and changes in the atmosphere over a short period of time (minutes to months). You might say that weather is what you experience when you walk outside on any given day. Climate, on the other hand, denotes the state and changes in the atmosphere over longer period of time (years or decades). It is an aggregate of long-term patterns of weather averaged over time and space. You might say that climate is what you expect to experience when you step outside on any

Some examples include:



Use a reaction or blink your camera off if you've seen a magnolia or tulip in bloom this week!

Blink your camera on/off if you've spent 3 or more hours outside in the past week!

Blink your camera on/off if you've spent 3 or more hours today already on zoom!



given day. Dramatic weather changes can be an indicator that the climate is changing, but a single weather event doesn't necessarily tell us a lot about climate change.

4. Consider some metrics of local climate impacts.

Numbers that indicate changes in local places begin to help make global climate change more relevant. In MCS workshops we held for participants in the Philadelphia area, we often share three global and local facts:

- The global temperature has increased by about 2 degrees Fahrenheit since 1880.
- Sea levels on the Jersey Shore have risen 1.5 feet since 1911.
- Today, our area is four times more likely to experience an extreme hydrological event (i.e. a hurricane or a flood) than in 1980.

5. Grapple with the metrics of climate change and species loss.

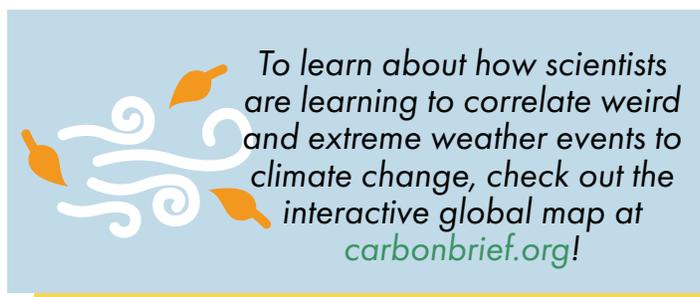
For our *Beyond Humans* workshops we grapple with some of the astonishing losses that climate change is causing. Some 10,967 species on the International Union for the Conservation of Nature's Red List of Threatened Species are further endangered by climate change. Even if we assume moderate climate change, by 2050 one in four species may very well be "committed to extinction." Though these forecasts can be difficult to hear or to process, they provide necessary context for workshop participants to research individual species' or a specimen's climate story. Learning and sharing their stories offers a concrete way to take climate action in solidarity with a world that is more than human.

Documenting species' or specimens' stories and then sharing them through the MCS frameworks can help participants engage with climate change and build climate literacy. Learning to research, tell, and share these stories offers a crucial step toward a more ecologically responsible future.

6. As you move into the next steps of crafting a story, you can use the *Beyond Humans* worksheet on page 61 to help you stay organized. You can also fill out this online *Beyond Humans* form for inclusion in the climate storybank.

The form asks you to include:

- Storyteller name
- Species common name
- Scientific name
- Habitat



How to Tell Climate Stories Beyond Humans

- Why did you choose this species? (i.e. personal meaning, sighting in storyteller's environment, invasive species, connection to class, etc.)
- How is this species experiencing climate change? (Think in terms of the senses.)
- Any additional interesting facts
- How does it all make you feel?

You can find this worksheet on page 61 of Highlighted Resources!

THANK YOU FOR SHARING YOUR BEYOND HUMANS STORY!

MY CLIMATE STORY

YOUR NAME _____
EMAIL _____
SPECIES COMMON NAME _____
SCIENTIFIC NAME _____
HABITAT _____
WHY DID YOU CHOOSE THIS SPECIES? _____
HOW IS THIS SPECIES EXPERIENCING CLIMATE CHANGE? _____
ANY ADDITIONAL INTERESTING FACTS? _____
HOW DOES IT ALL MAKE YOU FEEL? 😊 😐 😞 😡 😢 😭 😏

CIRCLE THOSE THAT BEST DESCRIBE YOUR CLIMATE STORY!

YOU GET TOO COLD TOO MUCH WATER NOT ENOUGH WATER BACKYARD DROUGHT WILDFIRES HOW HUMANS ARE AFFECTED HOW HUMANS ARE AFFECTED SUBSIDENCE

AFTER YOU CONTRIBUTE, PENN WILL ADD YOUR STORY TO OUR PUBLIC STORYBANK AND MAY USE ON OUR PUBLIC CHANNELS. PENN WILL NEVER PUBLISH YOUR EMAIL ADDRESS.

Feel free to attach drawings, links, or notes to this page. We are thrilled to share your story!

UPLOAD TO: [MY-CLIMATE-STORY.ORG](https://my-climate-story.org) OR EMAIL MAIL TO: [PENN@MY-CLIMATE-STORY.ORG](mailto:penn@my-climate-story.org)

604 WILSON HALL, 204 S. 30TH STREET
PHILADELPHIA, PA. 19104

7. Get out your S-I-S-Rs (scissors).

The S-I-S-R storytelling framework helps organize your story's ingredients. Your story needs them all. You choose your story's S-I-S-R: its Setting, where in the world it takes place; its climate Impact, how climate is driving changes to your setting; the Senses you need to witness these changes; and your Reflections on what these changes mean--for the species, for the ecosystem and its other plants and animals (including humans), for you.

S-I-S-R Framework

Setting: Consider a plant or animal species you love. Where does it live? What is the setting for its story? Think of an ecosystem or environment.

Impact: Ask how is that setting impacted by our changing global climate? Do those impacts affect "your" species? How?

Sense: How can you use your five senses to observe that change? Can you see it? Hear it? Smell it? Touch or even hear it? What other climate sensing instruments have been used to observe this change?

Research + Reflect: Dive deeper and supplement your story with further research on the species you chose. How do you feel about this change?

Climate Storytelling in 4 Steps

S-I-S-R Climate Stories

S Setting: Think of a place. Get specific!!

I Impact: Think of how that place has changed because of our changing global climate.

S Sense: What did you use to sense this change? How did you see, smell, touch, hear, taste, or otherwise sense it?

R Reflect: How has this change impacted you? How does it make you feel?

You may want to add to your story by doing some research.
If your story includes plant or animal species, consider researching how climate change has impacted it.

Contribute your story at: my-climate-story.org

PENN PROGRAM IN ENVIRONMENTAL HUMANITIES

Research Tips

The research for your climate story can be as thorough or as quick as you like, depending on how long you have. Just always make sure you're using a source you can trust!

It can be in print, like a recently published encyclopedia, or a digital resource like Wikipedia, a website, or a report. If you're searching the web for information, you'll need to evaluate the sites that come up in your search to make sure they are offering reliable information based on facts, not opinions. Good questions to ask as you evaluate a source are: Who is the author? What are their credentials? How do they know what they know? Are their claims supported by evidence? Is there a bias in the writing? One good resource is the Audubon Society's page. They are a nonprofit organization with a long history, and their website has detailed, up-to-date information about birds and climate change based on scientific data. You might get started by doing a google search for "species name" + "climate change."

8. Further reflections on your research: What does it all mean? You might ask yourself:

*Was there anything you were surprised to learn as you researched how climate change impacted "your" species and setting?
How did you feel as you moved through the S-I-S-R exercise?
How do you imagine "your" story might make others feel?
What can you do with those feelings?*

Be sure to check out the resources for further action at the end of this workbook.

Consider sharing your *Beyond Humans* Climate Stories to the MCS Storybank.

Remember: Your compassionate engagement, careful research and reflection, and your listening work are crucial forms of climate action!

9. Share your story!

There are a number of ways you can share your *Beyond Humans* Climate Story to our growing storybank. You can fill out our contribution form with a written account. Perhaps you will draw a picture or take a photo of a plant, insect, or animal you see and share that along with their story--many *Beyond Human* Climate Stories feature in MCS Instagram stories.

You might video or audio record the sights and sounds you associate with the change you're experiencing. You might record someone — even yourself — telling the story and submit the audio file. The form supports many types of media files!

WAYS TO SHARE YOUR CLIMATE STORY



Choose the option that feels best to you!

Fill out the contribution form at my-climate-story.org/contribute/

The form supports many types of media files!



Write your story out



Take a photo or draw a plant, insect, or animal you see and share that along with their story



Video or audio record your story, or turn your camera or mic to a plant, animal, or insect to tell their story

Share through social media using the hashtag [#MyClimateStory](https://twitter.com/MyClimateStory)

Call the My Climate Story Hotline at [267-499-3973](tel:267-499-3973)

Leave a short glimpse of your experience, including how you feel, as a voicemail message.

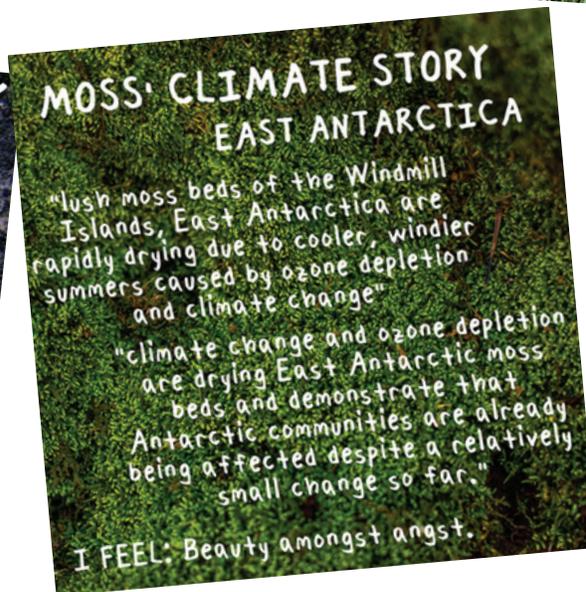
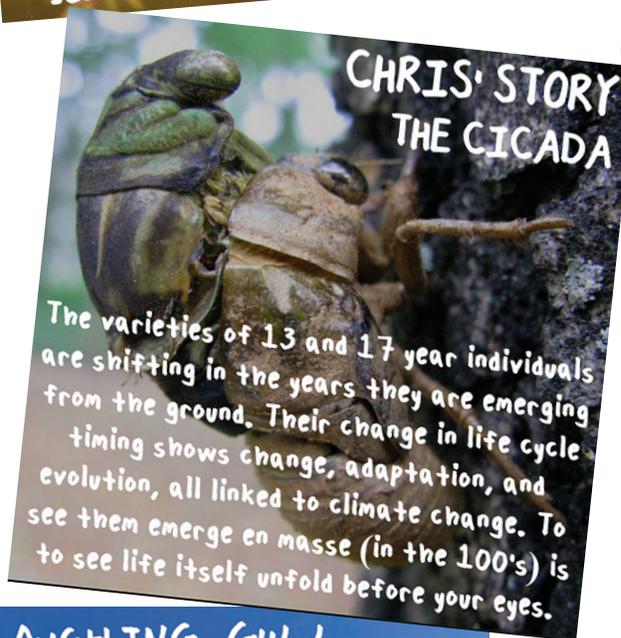
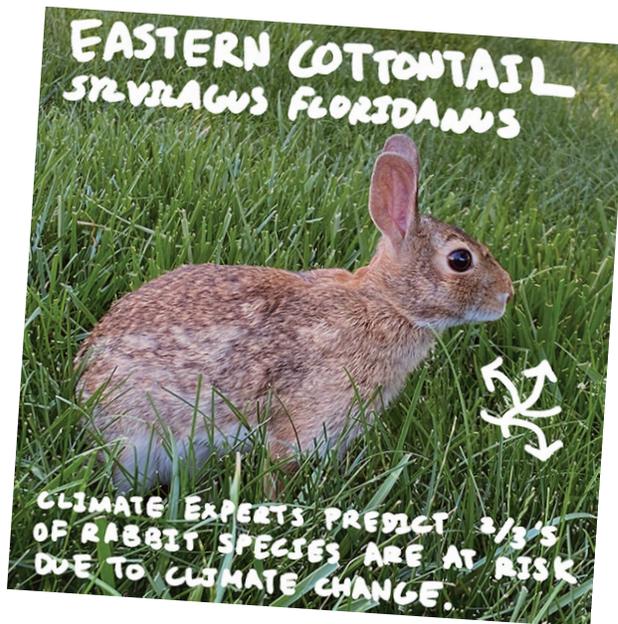


PENN PROGRAM IN ENVIRONMENTAL HUMANITIES

MY-CLIMATE-STORY.ORG

PPEHLAB.ORG

Check out these *Beyond Humans* Stories!



See more stories on Instagram
[@my_climate_story!](https://www.instagram.com/my_climate_story/)





It can be difficult to talk about the climate crisis. It's not pleasant to read about the growing number of endangered species, or about human-made catastrophes that destroy landscapes across the world. It's not comfortable to sit with the fact that by 2100, NASA predicts that sea levels will rise by anywhere between one and eight feet. The changes to our world can't be captured in short vignettes of starving polar bears or even of raging fires sweeping across plains or smoldering even in rainforests. Climate change's impacts aren't far off. From superstorms to "wacky weather," climate's impacts are here and now, and they're getting worse. Climate menaces many homes, and its toll is falling disproportionately on already marginalized populations, near and far.

We often use language to distance ourselves from the climate crisis, sometimes unwittingly, sometimes on purpose. We speak of climate change in big numbers. It can be easy to slip into numbness as daily CO₂ levels rise. Climate scientists and others close to the crisis sometimes speak of a cycle of despair and helplessness, a kind of **climate grief**. Yet we know that talking about climate change is absolutely crucial to help us build communities better equipped to cope with the myriad challenges climate change poses.

My Climate Story offers a more personal approach to talking about climate in these difficult times, inviting us to explore and document what's unfolding. Many data points and various kinds of data are required to measure how the world is changing and what those changes mean. Climate stories are personal narratives that illustrate how our changing climate has impacted the lives of everyday people in the places they call home. They offer an invitation for storytellers and listeners to reflect on global climate change in local environments.

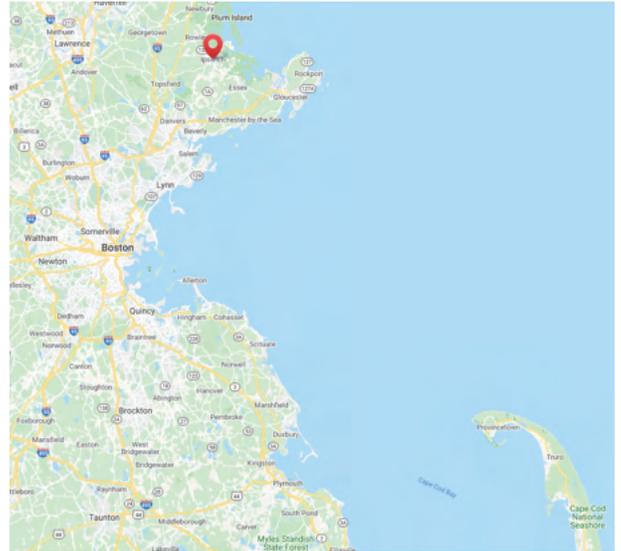
As climate impacts intensify, stories of how local changes are changing individuals' life stories and their communities provide powerful tools to help recognize the meaning and significance of what's happening around us. This project aims to encourage telling and sharing climate stories in and with community, getting our stories out to media partners, and communicating them with policymakers and elected officials. Climate change is happening now, and climate stories offer a valuable source of data about its local impacts.



How to Tell Your Own Climate Story

All climate stories can be submitted to *My Climate Story's* public data bank--yours too. We like to call this open and shared resource a "storybank." We hope you'll use it to browse and read others' climate stories. Maybe you'll search it using one of the project's metadata tags. You can search the storybank for all the stories that feature "not enough water," for example, including many set on the American west coast. You'll also find stories of "too much water," often on the east coast.

All stories are geolocated, and you can search them by state and country. When you click on the state category, take "Massachusetts" as an example, the storybank serves up the stories set there. Open one, and you'll be taken to its precise location, like in this short story set in Massachusetts in the town of Ipswich. As the storyteller explains, the river meets the ocean there and more powerful storms, nor'easters, are bringing "water ever closer to my cousin's home." It's a short and tragic tale, "There is no resale value left, and it's her only home."



Perhaps you are an educator and you can use the storybank and its many tales, some short, some long, in your classroom. They help make sense of abstract and overwhelming numbers. Written in personal language, they offer connection.

And you don't have to tell your climate story in English! We want to hear your story in the language that best connects you to home. Climate story forms are now available in fifteen languages: Arabic, English, Filipino, French, German, Greek, Hindi, Indonesian, Italian, Japanese, Mandarin, Mongolian, Russian, Spanish, and Swahili. If you speak another language, we'd love to hear from you, and if you find any errors in our storytelling forms, please let us know. This public research project grows and strengthens with your participation.

Most importantly, we encourage you to share your climate story. Our words make worlds. Your words, your climate story, can help fuel our path to a world of zero emissions--a world where homes don't lose all value or, worse, get destroyed. Creative writers have long helped us imagine other futures. You can help us understand what's going on in the here and now. By sharing your story, you can help bring better futures into being.

In the following recipe, we share tips and tricks for crafting your climate story. We promise: it's worth it. We also show you how to share your story to the storybank. You can send us the paper you've written it on, zap us a photo of your story, or fill out a digital story form, using the language of your choice. We'll do the work of tagging up your story and feeding it into the data bank. We really want to know: what's your story?



Recipe for Telling Your Own *Climate Story*



- Step 1** Don't overcomplicate it.
- Step 2** Know that your story is exciting enough.
- Step 3** Include photos, videos, drawings, or other media with your story. Stories can include more than words. Add to yours with a photo, or opt for a video account of the changes you're sensing.
- Step 4** If you're stuck, try "climate interviewing."
- Step 5** Share your climate story.

Keywords: climate impacts, climate literacy, climate narratives, storytelling

Recipe Notes for Your Own *Climate Story*

1. Don't overcomplicate it.

Your climate story can be a few sentences, a few paragraphs, or many pages! You can follow the S-I-S-R storytelling framework when telling a new climate story. You may choose to brainstorm for a couple minutes, then set a five-minute timer and write following the "scissor" prompts.

Climate Storytelling in 4 Steps

S-I-S-R

Climate Stories

- S Setting:** Think of a place. Get specific!!
- I Impact:** Think of how that place has changed because of our changing global climate.
- S Sense:** What did you use to sense this change? How did you see, smell, touch, hear, taste, or otherwise sense it?
- R Reflect:** How has this change impacted you? How does it make you feel?

You may want to add to your story by doing some research.

If your story includes plant or animal species, consider researching how climate change has impacted it.

Contribute your story at: my-climate-story.org

PENN PROGRAM IN ENVIRONMENTAL HUMANITIES

2. Know that your story is exciting enough.

While the effects of the climate crisis are inarguably catastrophic, they aren't limited to dramatic weather events like hurricanes, floods or droughts, or only relevant to far away places. There are more subtle ways that we can all sense climate change, even in the seemingly mundane.

3. Include photos, videos, drawings, or other media with your story.



Stories can include more than words. Add to yours with a photo, draw your experience, or opt for a video account of the changes you're sensing. For example, Faye told us a story about her childhood memories of snowstorms and included photos of herself and her sister as little kids on a snow day.

Photo credit: Faye Parker

4. If you're stuck, try "climate interviewing."

Ask a loved one, roommate, or acquaintance to tell you their climate story. Interviews can be a valuable way to start conversations across generations and languages about our changing world. (You can learn more about how to conduct a climate interview in the next chapter on *Climate Conversations*.)

5. Share your climate story.

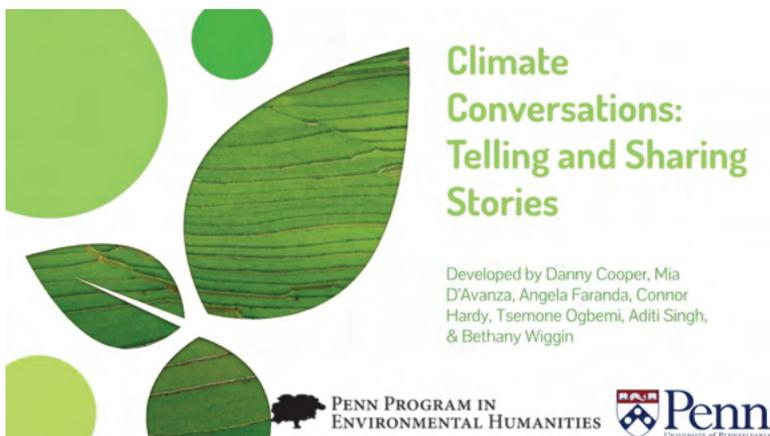
We all have climate stories to tell. When put together, they show how the changing climate has impacts on every community. You can submit your story to our storybank at my-climate-story.org and check out all the climate stories from your town, region, or country.

We really want to know: what's your climate story?

My Climate Story Worksheet

A *My Climate Story* workshop worksheet helps you stay organized while gathering information for your story. Use, copy, and adapt this template. It asks for:

- Storyteller name
- Where does your story take place? (Does it have a zip code?)
- How have you sensed climate change? Do you see, smell, hear, or even taste it?
- Can you touch it?
- Does climate change touch you?
- How does it all make you feel?
- Are there visual or audio media you'd like to incorporate into your story?
- May we include your story in the story bank at my-climate-story.org?
Please share your email, so we can be in touch! (We won't share it publicly or anywhere else.)



If you're an educator, you might choose to lead a group workshop on climate storytelling (a topic you can learn more about in chapter four). Whether you're working alone or leading a group, you can read on and review these topics in our workshop slide deck, which you can find on my-climate-story.org.



Weather vs. Climate

Weather is...

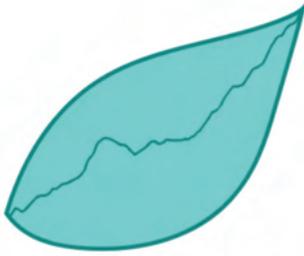
- Change in the atmosphere over a short period of time (*minutes to months*)
- What you can observe when you walk outside

Weather is what you actually experience in your environment when you walk outside.

Climate is...

- Change in the atmosphere over a long period of time (*years or decades*)
- Long-term patterns of weather: average over time and space

Climate is what you expect to experience when you walk outside.



THANK YOU FOR SHARING YOUR STORY!

MY CLIMATE STORY

YOUR NAME _____

EMAIL _____

WHERE DOES YOUR CLIMATE STORY TAKE PLACE? *Please add zip code, if possible!*

HOW HAVE YOU SENSED CLIMATE CHANGE?

HOW DO THESE CHANGES MAKE YOU FEEL?

CIRCLE THOSE THAT BEST DESCRIBE YOUR CLIMATE STORY!

TOO HOT **TOO COLD** **TOO MUCH WATER** **NOT ENOUGH WATER** **WACKY WEATHER** **WILDFIRES**
HOW HUMANS ARE AFFECTED **HOW NONHUMANS ARE AFFECTED** **SUGGESTION** _____

BY CONTRIBUTING, PPEH WILL ADD YOUR STORY TO OUR PUBLIC STORYBANK AND MAY USE ON OUR PUBLIC CHANNELS. PPEH WILL NEVER PUBLISH YOUR EMAIL ADDRESS.

Feel free to add drawings, links, or notes to this page. We are thrilled to share your story!

UPLOAD TO MY-CLIMATE-STORY.ORG OR SNAIL MAIL TO:

604 WILLIAMS HALL, 255 S. 36TH STREET
PHILADELPHIA, PA , 19104



Shelby-
Ohio

Kathy -
Mid-Atlantic
Flyway

Adamsesed-
Ethiopia

Lucy -
Pennsylvania

Chardonnay -
California

Alex - France

Examples of My Climate Stories

Everyday as I walked to class on UT's campus—about thirty miles from Bastrop—the smell and weight of smoke hung in the air. The temperature was well over 100 degrees every day for weeks. The university tested its emergency alarm system frequently. When it did, the sound of ominous, resounding alarms punctuated the heavy, smoke-filled air. --Jane Robbins, Austin, TX

In winter, temperatures have been rising. I used to wear big jackets when I was a child almost every day during the months of June and July. Now, I barely wear it, and I just wear sweaters. In summer, rains and storms are more frequent and bigger. If you go to the beach, people need to remain in their houses for some days because of violent storms that are similar to what you can see in other parts of the world, like the Caribbean. --Santiago, Buenos Aires

There was heavy rain in the summer this year, for the first time in the approximately 30 years my grandparents have lived in this part of Turkey. Meanwhile in Canada, my parents enjoyed a nice, bright, warm summer. Climate change doesn't look the same in every place and doesn't always seem like a disaster, but what's certain is that we're unprepared for the ways that regional patterns are shifting. --Aylin, Izmir, Turkey

Within the last ten years the amount of total rainfall across Oregon has dramatically decreased. The lack of rain has fried out the native plants that are used to a wetter cooler environment. As the rain decreases the drier forests have become a tinder box that can ignite from a spark from a vehicle's exhaust, or from an ember blown from a campfire. The population of Oregon is not accustomed to dry camping and does not follow the same procedures as the campers in dry locations like Nevada and Idaho; the drier climate of the Pacific Northwest has contributed to the fire season the Pacific Northwest has experienced the last several years. --Mitch, Oregon

Lengthening summers have caused a prolonged and intensified experience of seasonal affective disorder (seasonal depression). In New Jersey, we experience four distinct seasons. Now, it feels like spring and fall have been consumed by summertime, and with the inescapable heat comes despair. The beginning of summer always reminds me of traumatic moments in my life. Seasonal affective disorder makes me feel lonely, isolated, dejected, rejected, deflated, and hopeless. As the summers have begun to creep further into the calendar year, I find myself desperately clawing for the relief of cool air that signaled the end of summer and the start of a new school year during which I could reinvent myself and reconfigure my life. Now that those lines are blurred due to climate change's impact on New Jersey's seasons, I am unable to escape those feelings for even longer stretches of time, which feels increasingly dangerous for me. Living through these changes feels like abuse from the world itself. --Andrew, Pennsville, NJ

In 2019, it rained 3 months worth of water in 3 days. The Roman-era bridges of the Cavaillon River in my town of Apt were destroyed. --Alex, Apt, France



CHAPTER 3 How to Make Climate Conversations

We know it's hard to talk about climate. Climate change can be confusing.

Maybe you've wondered: if humans are warming the planet, why is this winter so cold? You may be experiencing an effect of the newly unstable polar vortex. Companies that profit from producing tons of CO₂ have spent tons of money to make climate change even more confusing. They've got deep pockets. One big oil company, Exxon, understood the huge risks of pumping CO₂ into the atmosphere more than fifty years ago. Their own scientists warned them in the 1970s. Their solution? Plow their profits into a climate disinformation campaign. As the effects of climate change now make outright denial pretty hard, these special interests' strategies have shifted to delay and distraction. Climate disinformation strategies stretch from lies to greenwashing to paying fake experts to sow uncertainty and other misinformation. Their well-orchestrated campaign has misled the American public and made it harder to talk about climate. It all adds up to a climate illiteracy campaign.

One particularly pernicious strategy to keep people in the dark about climate change is the politicization of climate, i.e., the false belief that climate change is a matter of politics or opinion, rather than of observable changes that are measurable and verifiable. Maybe you've heard Miss Manners say, "Don't talk politics at the dinner table." Climate has become a matter we don't talk about in "polite" society. Climate profiteers have successfully created a "climate of silence." But we can't afford to be silent about what climate change is doing.

Many surveys document our sorry state of national mistrust fueled by disinformation. Well-designed polls show individual views on climate change depend more on political views than level of education. Disinformation campaigns are polarizing us. The story of how climate became a partisan issue in the United States offers a cautionary tale for liberal democracy, and we suggest some materials to explore it further in the resource section at the back of this workbook. It's a conundrum for us to solve: at this moment when scientists have reached overwhelming certainty that human actions are fueling global warming, Americans' views about climate split sharply along party lines. Where we get our news and who we talk to form our worldviews, and we mostly like to talk to "people like us."

Unless you love to talk politics, it can be hard to talk about climate with your great uncle at Thanksgiving, for example, depending on your uncle. Maybe he doesn't deny that climate change is happening. Maybe he thinks: it's just not that bad. It's possible he's been reading material that argues that because plants need carbon, massive carbon emissions are somehow good. Nope.



How to Make Climate Conversations

But there's some good news in these polls too: young people in particular recognize that climate change is shaping their life stories, and they're forcing us to talk about that hard fact--and urging us all to take action to reduce carbon and other greenhouse gas emissions.

Climate conversations offer simple strategies to get people talking about climate, without yelling across the table. We suggest some tips to keep climate conversations grounded in lived experience--how we're sensing our local environment and how it's changing.

DEEPENING THE CONVERSATION

Like any good recipe, our recipe for climate conversations borrows from others.

There are numerous essays and online lectures that offer advice about "talking about climate change at Thanksgiving" and other family holidays. **If you have five minutes**, check out the short guide to talking turkey and climate change by the Union of Concerned Scientists. **If you have fifteen minutes**, watch the TEDxMIT talk that suggests "seven ways to talk about climate change that almost all can agree on." **If you have an hour**, tune in for a super smart lecture by scientist and Christian evangelist, Dr. Katharine Hayhoe, where she presents fascinating studies that show "how climate conversations with friends and family enter people into a 'pro-climate social feedback loop.'"

Our *Climate Conversations* materials were designed specifically to facilitate cross-generational climate storytelling. While *Beyond Humans* stories and *My Climate Stories* produce single-author climate narratives, *Climate Conversations* invite people, young and old, to co-author a shared story. When we first developed our *Climate Conversations*, we were thinking in particular about how to encourage young people to bring what they are learning in Climate Storytelling workshops outside the classroom and into their communities. We tested various versions of the activity in workshops with different age-groups and tweaked it based on their responses.

The *Climate Conversations* model in this workbook functions really well in two ways. You might use it as a pre-writing activity to help participants generate their climate story by talking together. Or, you might use it to assist younger participants to become climate interviewers. In carrying out these exercises they'll learn how to do short ethnographic interviews and collect oral histories. (These are amazingly useful and highly transferable skills for work beyond climate too!). These exercises may be particularly helpful to involve climate storytellers whose own lives are still too short to observe climate trends.

This chapter's recipe for *Climate Conversations* teaches you how to do an interview to elicit a climate story. If you like, you can reverse roles and do a story swap.



Recipe for *Climate Conversations*



- Step 1** Before you start a conversation or an interview, consider what a *climate story* is and how it connects global climate change to an individual life.
- Step 2** Draft interview questions whose answers provide pieces for a climate story. Consider the six big questions: **Where, Who, When, What, Why, and How?**
- Step 3** Think about how to put your partner at ease so you can have a great climate conversation together.
- Step 4** Decide if you want to document this conversation. If so, will you make an audio recording? Take notes? Use this chapter's worksheet or this digital worksheet?
- Step 5** Consider possible follow-up questions you can ask that will encourage your partner to expand or elaborate.
- Step 6** When you meet your partner, explain your interest in their story and show your gratitude for their time. If you want to document your conversation, ask for permission to take notes or record.
- Step 7** Offer your definition of a climate story. Begin asking your questions.
- Step 8** Listen hard. Are you hearing a story emerge?
- Step 9** Ask follow-up questions.
- Step 10** Invite your partner to share how their story makes them feel.
- Step 11** Ask if your partner might be willing to share their story with others. Explain how story sharing works.
- Step 12** Thank your partner.
- Step 13** If you have permission, complete documentation, share it with your partner, and then contribute your conversation to the storybank.

Recipe Notes for How to Make Climate Conversations

1. Before you start a conversation or an interview, consider what a climate story is. Draft questions whose answers offer pieces in a climate story.

You can make this short definition of a climate story your own: a climate story (n.) is a personal story that connects global warming and other climate changes to individuals' experiences, often (although not always) near home.

2. Think about how you can put your partner at ease so you can have a great climate conversation together. Consider the six big questions: Where, Who, When, What, Why, and How?

Open-ended questions invite more interesting answers.

- Try asking: Where did you grow up? Avoid: Did you grow up in Philadelphia?
- Try asking: What is a place in the world that you love? Avoid: Do you love your neighborhood?
- Try asking: What makes this place important to you? Avoid: Is this place important to you?
- Try asking: How is this place changing? Avoid: Do you notice different weather patterns?

There's nothing more important to put your partner at ease than your active, attentive listening. Of course, you'll also want to make sure that you're meeting together in a place where you're both at ease, whether that's in person or online.

You can further put people at ease when starting a climate conversation by sharing that anyone can have a climate conversation. They're not only for scientists. *Climate conversations* use non-technical, everyday language, and you can encourage your partner to use the language they are most comfortable in. Climate storytelling prompts are available in fifteen languages.

We encourage people's stories by showing our interest. Really listening requires focused attention and careful follow-up questions.

3. Decide if you want to document this conversation. If so, will you make an audio recording? Take notes? Use this chapter's worksheet or this online storybank form ?

If you choose to use our digital form for inclusion in the storybank, you can also upload many different kinds of media that add to your climate story, with a 2MB limit to your upload. Here are the file types you can submit to the storybank:

Images: .jpg, .jpeg, .png, .gif, .ico

Documents: .pdf (Portable Document Format; Adobe Acrobat), .doc, .docx (Microsoft Word Document), .ppt, .pptx, .pps, .ppsx (Microsoft PowerPoint Presentation), .odt (OpenDocument Text Document)

Audio: .mp3, .m4a, .ogg, .wav

Video: .mp4, .m4v (MPEG-4), .mov (QuickTime), .wmv (Windows Media Video), .avi, .mpg

4. Consider follow-up questions you can ask to encourage your partner to expand or elaborate.

As you consider what follow-up questions you might ask, know that you will be listening hard for story threads. What details might you want to hear more about?

- Try: Can you tell me more about _____?
- Try: I am fascinated by your mention of _____. Can you share why that is important to you?
- Try: You mentioned this place is changing. How do you think these changes might relate to climate change and its local impacts?
- Try: How do these changes make you feel?

5. When you meet your partner, explain your interest in their story and show your gratitude for their time. If you want to document your conversation, ask for permission to take notes or record.

Show your interest and gratitude sincerely, succinctly. The best way to honor someone's story and time is to show up and listen. Smiles and eye contact help too :)

6. Offer your definition of a climate story. Begin asking your questions.

As you share your interest in their climate story, offer your definition of what a climate story is. The S-I-S-R storytelling model can be really helpful here. Maybe you show your partner this graphic. The goal of a climate interview is to facilitate someone's climate storytelling. Ideally, a climate interview should feel like a conversation, although we'd expect the person being interviewed to spend more time speaking than the interviewer.

7. Listen hard. Are you hearing a story emerge?

What threads are you hearing in the answers to your open-ended questions that you want to hear more about? What threads can you help weave into a story?

8. Ask follow-up questions.

You might use the S-I-S-R model as a sort of "checklist," asking questions about S-I-S-R components that the interviewee didn't cover when answering more open-ended questions. You might also choose to share the S-I-S-R model with the person you're interviewing while explaining what a climate story is.

How to Make Climate Conversations

Setting: Think of a place.

Impact: How has this place changed because of the changing global climate?

Sense: How did you smell, see, hear, touch, taste, or otherwise sense this change?

Reflect: How has this change impacted you?
How does it feel?



Climate Conversations Worksheet

Mini Climate Interviews

We're going to try interviewing each other in pairs, and everyone will have a chance to both share and collect a climate story.

- 5 minutes per person
- Explain *My Climate Story* and prompt your partner to tell their own.
- If you're willing, make an audio recording of your interview using your phone.

In your small group or breakout room:

- Take a breath!
- Get oriented (quick icebreaker?).
- Ask: is it okay to audio record this conversation? If the answer is yes, designate one person to use their phone to make a voice memo of the whole conversation. If you're in charge of the recording, make sure to take out your earbuds so that everyone's story is audible!
- Decide who will first be the interviewer and the interviewee.
- Remember to ask each other whether you can share one another's stories.
- Try to play each role once.

The interviewer:

- Ask open-ended questions that invite a long answer (more than Y/N).
- Is there a follow-up question?
- Are you hearing a story in the answer? What is it?
- Encourage the person to say more.
- Always encourage the interviewee to use the language that is most comfortable to them.
- Does the interview consider the story's Setting + Impact + the Senses + a Reflection (S-I-S-R)?

The interviewee:

Share your story! Listen with open ears to the interviewer’s questions and let them guide you through the conversation.

You can find this worksheet on page 63 of Highlighted Resources!

THANK YOU FOR SHARING YOUR CLIMATE CONVERSATION!

MY CLIMATE STORY

YOUR NAME _____

YOUR PARTNER'S NAME _____

WHERE DOES YOUR PARTNER'S CLIMATE STORY TAKE PLACE? (IF IT HAS A ZIP CODE, PLEASE ADD IT.) _____

WITH THEIR PERMISSION, PLEASE RECORD YOUR PARTNER'S CLIMATE STORY HERE:

IS YOUR PARTNER WILLING TO HAVE THEIR STORY SHARED TOWARD THE END OF THIS WORKSHOP?

YES NO OTHER _____

IS YOUR PARTNER WILLING TO HAVE THEIR STORY SHARED IN THE PPEH STORYBANK AND (POSSIBLY) ON SOCIAL MEDIA?

YES NO OTHER _____

CIRCLE THOSE THAT BEST DESCRIBE THIS CLIMATE STORY!

TOO HOT TOO COLD TOO MUCH WATER NOT ENOUGH WATER WALKY WEATHER WILDFIRES

HOW HUMANS ARE AFFECTED HOW NONHUMANS ARE AFFECTED SUGGESTION

BY CONTRIBUTING, PPEH WILL ADD THIS STORY TO OUR PUBLIC STORYBANK AND MAY USE ON OUR PUBLIC CHANNELS. PPEH WILL NEVER PUBLISH YOUR EMAIL ADDRESS.

Feel free to attach drawings, links, or notes to this page. We are thrilled to share your story!

MY-CLIMATE-STORY.ORG

Let’s brainstorm some interview questions here!



Maybe you have written your climate story. Maybe you've taken climate storytelling workshops. Maybe now it's time to learn how to offer a workshop and help others tell their climate story. If you've read this far, you know that climate stories offer a basis for climate literacy and climate action. You understand that the power of climate action expands when we come together. You are ready to build connections.

As the *My Climate Story* network grows, we grow to understand our climate story and its many individual stories. Our shared story is changing and growing both as climate change accelerates and as the movement to curb climate change picks up size and speed. It's like an equation with multiple variables or a choose your own adventure tale for a whole planet. We don't know how it will end.

At the time of writing this workbook, delegates to the United Nations Conference of Parties (COP) are meeting for the 26th time. They are working to negotiate pledges from countries big and small to hold global warming at century's end to a rise of 1.5 degree Celsius (2.7 degrees Fahrenheit). Time is rapidly running out to meet commitments made by the 197 signatories to the UN's Paris Agreement of 2015.

What was the Paris Agreement's goal? "To limit global warming to well below 2 [3.6 F], preferably to 1.5 degrees Celsius [2.7 F], compared to pre-industrial levels." This squishy language, "well below 2, preferably to 1.5 degrees," hints both at the difficulty of these negotiations and at the reason why some climate advocates have lost faith in the UN Framework, including many negotiators from small island states and developing countries. They have contributed the least to global warming but face its most dire consequences, including their very existence. Addressing COP26 in Glasgow, Ugandan climate activist Vanessa Nakate spoke the doubts of many when she said, "God help us all if you fail to prove us wrong."

On average, the planet is already 1.2 C (2.16 F) warmer than it was in 1800. In 2018, the Intergovernmental Panel on Climate Change (IPCC), the group of experts whose reports provide the basis for UN climate negotiations, issued a special report about the difference between 1.5 (2.7 F) degrees warming and 2.0 (3.6 F). The report was spurred by requests from member states whose future is already imperiled or ended by 1.5 warming. If we continue on with business as usual--assuming that the consumption of coal has flatlined and renewables have become cheaper--the planet at 2100 will have warmed by 3 degrees C (5.4 F). While the planet might not mind it, humans (and many other species) can't take the heat.

On the Scene: Climate Protests

Megan Specia
Reporting from Glasgow

The protests related to COP26, the United Nations climate summit, peaked on Friday and Saturday, drawing tens of thousands of people to Glasgow's streets.

Here's what I saw →



Don't forget to visit our

Resource Highlights

for more information or our digital companion for research links!

How to Host a Workshop

Even though we can't take the heat, we're not getting out of the kitchen. This chapter serves up a recipe for climate storytelling workshops, whether you're guiding participants to tell a *Beyond Humans* story (whose recipe is in chapter one), to craft a personal *Climate Story* (chapter two), or to follow the recipe for healthy *Climate Conversations* (chapter three). In chapter three, you also learned about how the climate disinformation campaign mounted by the fossil fuel industry and related special interests has fostered a "climate of silence" around climate change. Their tactics have made climate change seem political, as if the basic science were unsettled and not a topic for polite conversation. Unfortunately, climate change is real, and it's caused by human activities.

Another deeply harmful strategy deployed in the climate disinformation campaign is the myth that individual humans, rather than the fossil fuel industry, bear prime responsibility for Anthropogenic Global Warming (AGW), more commonly called climate change. Study after study, report after report (after report) reveal what an enormous amount the industry has known about global warming for years--and how they decided to bury it. Instead of deciding to warn the public of the massive risks they knew about, they instead launched a massive industry-wide misinformation campaign managed by public relations firms. They paired strategies of denial with a disinformation machine designed to sow doubt about climate science and uncertainty about climate change's effects. In more recent years, as climate change's impacts have become obvious and undeniable, fossil fuel companies have shifted strategies. Now they're working to delay climate action and to distract. But again, these strategies of delay and distraction are designed to produce climate inaction. Climate workshops work to recognize the impacts that simply don't allow delaying climate action.

DIVE INTO THE ORIGINS OF CARBON FOOTPRINTING

In 2010, BP's Deepwater Horizon rig fatally exploded--and caused a spill that went on for 87 days, dumping four million barrels of oil into the Gulf. Forced to make record reparations, BP also launched a \$250 million public relations campaign designed to shift attention away from the fossil fuel industry's responsibility for environmental harms, including global warming. Where did they re-direct that responsibility? On to me and you, everyday consumers. To do so, they popularized the carbon footprint, featuring it on their website and in advertisements in major newspapers. As science writer Mark Kaufman reported:

It's evident that BP didn't expect to slash its carbon footprint. But the company certainly wanted the public — who commuted to work in gas-powered cars and stored their groceries in refrigerators largely powered by coal and gas generated electricity — to attempt, futilely, to significantly shrink their carbon footprint.

Carbon footprints can be a useful tool, but calculating them and attempting to reduce them, household by household, fails to provide a serious strategy to get the planet off fossil fuels, a fact illustrated by the Covid-19 pandemic when emissions briefly blipped down and resulted in no difference in global warming.

So what are effective strategies for meaningful climate action? Knowledge famously is power, and it provides the basis for all effective action to curb climate change and reduce its many harms. Hosting a climate workshop offers one concrete strategy for you to scale up your action. As a climate storyteller and coach, you'll be in good company. Artists, writers, storytellers, and educators working across the arts and sciences have been key to expanding the movement for meaningful climate action. You can check out this workbook's section for further resources and check out work that has shaped the *My Climate Story* project.



When you facilitate a climate workshop, you will encounter challenges that you won't when working on a personal climate story. Our team has offered workshops in school settings and in classes as early as sixth grade. The workshops can quite quickly and easily be tailored and used in classrooms from math to history, from chemistry to English. They could provide the basis for an assembly or a club activity. They build both numeracy and literacy skills, in addition to offering a basis for climate literacy and climate action. Our team has also offered workshops in retirement communities, to faith groups, and to advocacy groups. Participants tell us how deeply moving their groups find climate storytelling--the shared conversations as much as the individual stories. Teachers and workshop facilitators appreciate the way the workshops' activities meet participants where they are, grounded in participants' lived experience.

This chapter's tips and tools will help you create workshops for all ages and for participants who might be your peers, students, or complete strangers. You'll find a section on the core goals of a climate storytelling workshop, and a list of things that every climate storytelling workshop should contain. And, this chapter offers you a script. We can't wait to hear how you lend it your voice. We also want to take a moment and salute you for your work. We're so glad you're here to help scale up climate literacy and action.

As you prepare for your workshop, the checklist on page 64 can help you stay organized. Also, you can find sample icebreakers on page 67 in the Highlighted Resources!



MY CLIMATE STORY

PRE-WORKSHOP CHECKLIST

- Decide if you will be recording the workshop. If so, check out our "If you choose to record a workshop" sheet for tips.
- Craft your statement on group norms. Feel free to borrow or adapt this one.
- Create topical icebreakers. Here are some samples.
- Review the materials for the workshop you'll facilitate (presented in chapter 1, 2, and 3).
- Familiarize yourself with the further resources in this workbook and online that your group might use after the workshop.
- Remind yourself to hold space for the difficult emotions that may arise in these workshops.
- Reflect on every workshop's three main goals: guide the recognition of climate impacts, explore the emotions, and inspire climate action.
- Edit the workshop script to make it your own, keying it to the sample slides for your workshop.
- Modify sample slide deck for your workshop as needed and appropriate.

MY-CLIMATE-STORY.ORG



MY CLIMATE STORY

SAMPLE CLIMATE STORYTELLING WORKSHOP ICEBREAKERS

Icebreakers put participants at ease. They can be especially helpful with younger audiences, like schoolchildren, but they tend to work on everyone! Choose your questions to break the ice to match your audience, your location, the season, recent news events, etc. For older audiences, you might begin with a general question and then connect it to local climate impacts.

- Use a reaction or blink your camera off if you've seen a magnolia or tulip in bloom this week!
- Blink your camera on/off if you've spent 3 or more hours outside in the past week!
- What is a food you love that you can't have in every season?
- Add a word that describes what you want our energy future to look like.
- Do you think the recent weather is related to climate change?

MY-CLIMATE-STORY.ORG



Recipe for How to Host a Workshop



- Step 1** Before the workshop, create a safe and friendly space for climate storytellers, online or in person.
- Step 2** Check out the template script for a climate workshop. Beginning on page 68, you'll customize it in step 4.
- Step 3** Gather and file media releases, adopt a statement on group norms, and create relevant ice breakers. If you will be recording your workshop in any form, you'll need to ask for participants' consent first.
- Step 4** Reflect on your workshop's goals.
- Step 5** Edit the script for your role as workshop facilitator and hack the workshop slides as needed.
- Step 6** Begin the workshop by sharing your own climate story and creating a shared space.
- Step 7** Guide your participants through the pre-writing activities.
- Step 8** Share writing tips and tricks for climate storytelling.
- Step 9** Let your participants start writing.
- Step 10** Facilitate participants' sharing their stories, including their experiences and emotions while crafting their stories.
- Step 11** After the workshop, provide next steps.

Recipe Notes for How to Host a Workshop

1. Before the workshop, establish an accommodating, safe, and friendly space, online or in person.

The first challenge of hosting a workshop is creating a safe space, maybe online or maybe in person, where participants feel comfortable sharing personal information and sitting with potentially difficult emotions. Some of the forms and formal elements in the next step will help.

2. Check out a template script in a section at the end of these recipe notes beginning on page 68. You'll customize in step 4.

3. Gather and file media releases, adopt a statement on group norms, and create relevant ice breakers.

The checklist for behind-the-scenes preparations lays the groundwork for an accommodating workshop space. Before the workshop, address some formal issues: Consider whether you need a media release. You can use the MCS project's standard release. It asks for permission to record a workshop and to use excerpts from recordings to create additional project resources, such as documentary videos.

- You need a statement on group norms. Feel free to borrow and adapt the one on page 66.
- Create some topical and fun icebreakers. There are some samples on page 67.

4. Reflect on the three main goals of every climate storytelling workshop and articulate your personal goals for your workshop.

Whether it's a workshop to research stories beyond humans, to document personal climate stories, or to conduct climate conversations, all climate workshops aim to accomplish three goals:

- help participants recognize they can sense climate change and have expertise to share about their surroundings, their local environment, and the personal impacts of their changing world
- explore participants' emotions around climate change in a safe, communal setting
- inspire a path toward climate action.

You and your participants will have additional goals for your workshop. In the workshop, you may ask participants to share their own goals. Before the workshop, clarify your own goals. Maybe you aim to

- Create drafts of climate stories that participants can refine on their own after the workshop.
- Build a collection of community climate stories to share with your newspaper.
- Use climate storytelling to introduce a unit on climate science.
- Publish stories in the project's storybank.
- Participate in the MCS project's big book of climate stories (ask us for more info!).

How to Host a Workshop

5. Edit the Script and Hack the Slides

Adapt this curricula for the climate workshop you'll offer. Don't be afraid to make materials your own. Please credit this project in any workshop and materials you offer. Work with the script template and workshop slides to develop your workshop. Will you choose a workshop on how to tell climate stories *Beyond Humans*, your own *Climate Story*, or how to make *Climate Conversations*?

Maybe you're leading a group who engages with climate or environmental issues and who needs less background information about climate change. You can use that extra time for the all-important share-out section. If you're working with high school students, then you might spend more time on icebreakers, making sure that the room feels more at ease and more able to share out later.

As you adapt this curriculum, it's critical to remember to hold workshop space for all the emotions that may come up as people sort through memories and experiences of climate change in familiar places. You probably have some idea of the importance of this space from the experience of writing your own climate story. You will want to prevent participants from feeling as though they have to rush through a moment that is emotionally resonant, or cut someone off when they're in the process of being vulnerable. Climate storytellers need their stories to be heard. Listening is a major part of the work.

Familiarize yourself with resources participants can use after the workshop. They include the climate storybank and the additional resources provided in this workbook. They include lists of books full of climate stories, climate art, and links to climate advocacy organizations whose mission and goals might resonate with you.

Pull out the script template (beginning on page 68), copy it, mark it up, and make it yours. These customizable materials, including companion slide decks for each of the three workshop types, are available for download at my-climate-story.org. We've hosted workshops with as many as four facilitators, and we each presented pieces of the script, keyed to workshop slides.

6. Kick off your workshop with your own climate story, improvising with your script in sync with your participants' needs.

Your climate story serves two purposes: it introduces you and it models what a climate story is. By the workshop's end, your participants will have a story that they too can share.

7. Guide your participants through the pre-writing activities.

The script guides you to conduct a first pre-writing activity on climate change and local impacts. It focuses on quantitative measures of climate change that include average global warming, inches and feet of current sea level rise, and increased changes of severe weather events. It guides

you to introduce a few fundamentals of climate literacy nuses interactive, low-stakes quizzes and mind-mapping activities.

A second set of pre-writing activities invites discussion about how climate change is known and represented. It asks participants to consider the big quant of climate data and contrast it with qualitative data, especially stories. What can numbers accomplish that stories cannot? What do stories capture that numbers fail to show?

8. Share writing tips and tricks for climate storytelling.

You're almost ready to start writing. As you think about your story, the S-I-S-R method can help you organize your thoughts and make sure you have all the key elements for a climate story: its setting, its impact, the senses and emotions activated, and your further reflections. Each workshop also has a storytelling worksheet that participants can use to stay organized and to streamline submission to the storybank.

9. Let your participants start writing.

Now it's time for you to get out of the way, reminding everyone that you're available for questions and support, if needed. Maybe you choose to put on the playlist for the crisis? You can add your favorite climate songs to this open playlist: <https://spoti.fi/3i4QFDd>

10. Share out.

Participants are likely not finished writing their climate story. That's okay. Remind them they can return to their draft and expand or refine. Ask participants how it felt as they began work on their climate story. Invite them to reflect on the process.

Be aware that difficult emotions may arise in this portion of the workshop. Compassionate engagement and careful listening are absolutely crucial. You can gently remind the group that these emotions indicate the power of climate stories.

11. After the workshop, next steps.

Be sure to end your workshop by guiding participants to possible next steps. One might include further work on their climate story. Another might be to take another climate workshop. Some participants might want to learn how to offer a climate workshop themselves.

Share the resources for further steps included in the workbook. They're organized for moments when we have five minutes, fifteen minutes, or an hour of time. They include materials for further reading and viewing and an invitation to get further involved in the *My Climate Story* public research project.

Encourage everyone to submit their story to the storybank.



In truth, the story of global climate change is many stories.

Some places are warming much faster than others. And while warmer averages might seem small, warming also feeds spikes in dangerous weather. Heat waves are already longer, more extreme, and more frequent. Europe has already experienced 2.2 degrees C (3.96 F) warming, smashing through hottest maximum temperature records. Successive heat waves in summer 2021 brought wildfires to Greece and thousands of deaths across the continent. Climate impacts in Africa are as big and varied as the continent. Heat waves and water stress are scourges to many places, from India to Australia. To the north, the Arctic is heating about three times as fast as the global average. Since 1970, Alaska has warmed by 4.2 degrees F, shattering various weather records.

Some climate impacts are disasters, costing billions of dollars annually. Impacts beyond extreme weather may be less obvious, but their stories are no less important.

All of this and more is the story of global climate change.

As places are impacted differently, so are people. Scholars urge we study “climate cultures” together with climate science. Human communities’ resilience on this transforming planet stem from cultures of resilience, rooted in the recognition that our lives are inextricably, marvelously entwined with life around us.

We can build positive climate cultures by promoting climate literacy, making sure to listen closely for local, even personal impacts. All our climate stories deserve witness.

The climate is changing. Why aren't we?



Little Library

Highlighted Resources

The following digital materials are listed with the text and chapter they support. A curated selection of further print and audio materials can be found at this section's end, followed by a few suggestions for further climate action.

Introduction

about 1.8 degrees Fahrenheit or a little more than 1 degree Celsius

[NASA Earth Observatory, *World of Change*](https://earthobservatory.nasa.gov/world-of-change/global-temperatures)

<https://earthobservatory.nasa.gov/world-of-change/global-temperatures>

increasingly fast

[NOAA Climate.gov, *Climate Change: Global Temperature*](https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature)

<https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature>

humans have caused climate change

[European Commission, *Causes of Climate Change*](https://ec.europa.eu/clima/climate-change/causes-climate-change_en)

https://ec.europa.eu/clima/climate-change/causes-climate-change_en

science literacy fails to predict

[Nature Climate Change, *The Polarizing Impact Of Science Literacy And Numeracy On Perceived Climate Change Risks*](https://www.nature.com/articles/nclimate1547)

<https://www.nature.com/articles/nclimate1547>

Artists

[Artsy.net, *These 10 Artists Are Making Urgent Work about the Environment*](https://www.artsy.net/article/artsy-editorial-10-artists-making-urgent-work-environment)

<https://www.artsy.net/article/artsy-editorial-10-artists-making-urgent-work-environment>

The People's Climate Vote

[United Nations Development Programme, *The Peoples' Climate Vote*](https://www.undp.org/publications/peoples-climate-vote)

<https://www.undp.org/publications/peoples-climate-vote>

2021 poll, conducted by the Pew Research Center

[Pew Research Center, *In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work*](https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/)

<https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/>

Publics a matter of serious concern

[Pew Research Center, *Concern Over Climate And The Environment Predominates Among These*](https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work/)

Highlighted Resources

Publics

<https://www.pewresearch.org/science/2020/09/29/concern-over-climate-and-the-environment-predominates-among-these-publics/>

a 2018 Pew poll conducted in 26 nations

Pew Research Center, Climate Change Still Seen as the Top Global Threat, but Cyberattacks a Rising Concern

<https://www.pewresearch.org/global/2019/02/10/climate-change-still-seen-as-the-top-global-threat-but-cyberattacks-a-rising-concern/#table>

in 2020

Pew Research Center, Despite Pandemic, Many Europeans Still See Climate Change as Greatest Threat to Their Countries

<https://www.pewresearch.org/global/2020/09/09/despite-pandemic-many-europeans-still-see-climate-change-as-greatest-threat-to-their-countries/>

poll conducted by Yale/George Mason ahead of the 2020 US elections

The Guardian, Guardian/Vice poll finds most US 2020 voters strongly favor climate action

<https://www.theguardian.com/us-news/2020/sep/23/us-voters-climate-change-guardian-vice-poll>

a 2019 NPR/Ipsos poll

NPR, Most Teachers Don't Teach Climate Change; 4 In 5 Parents Wish They Did

<https://www.npr.org/2019/04/22/714262267/most-teachers-dont-teach-climate-change-4-in-5-parents-wish-they-did>

separate NPR/IPSOS poll

NPR, Most Teachers Don't Teach Climate Change; 4 In 5 Parents Wish They Did

<https://www.npr.org/2019/04/22/714262267/most-teachers-dont-teach-climate-change-4-in-5-parents-wish-they-did>

MCS "storybank,"

PPEH, My Climate Story

<https://my-climate-story.org/>

Chapter 1

most deadly wildfire

Wikipedia, Camp Fire

[https://en.wikipedia.org/wiki/Camp_Fire_\(2018\)](https://en.wikipedia.org/wiki/Camp_Fire_(2018))

wildfires indicate

U.S. Environmental Protection Agency, *Climate Change Indicators in the United States*

<https://www.epa.gov/climate-indicators>

fueled by drought

Los Angeles Times, *As autumn rain in California vanishes amid global warming, fires worsen*

<https://www.latimes.com/local/lanow/la-me-rain-fires-california-20181113-story.html>

Stories of pets

The Atlantic, *The Animals of California's Devastating Camp Fire*

<https://www.theatlantic.com/photo/2018/11/the-animals-of-californias-devastating-camp-fire/576337/>

an "inconceivable" number

PETA, *Animal Deaths Go Unreported in California Wildfires*

<https://www.peta.org/features/animal-agriculture-causes-wildfires/>

Australian bushfires

Donna Haraway, *Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin.*

<https://doi.org/10.1215/22011919-3615934>.

we began the MCS project before Covid-19, by asking humans to share their climate stories

PPEH, *1.5 Minute Climate Lectures: "I'm Sensing Climate Change, What's Your Story?"*

<https://vimeo.com/359375609>

Aldo Leopold's call to "think like a mountain"

Aldo Leopold, *A Sand County Almanac, and Sketches Here and There*

<https://www.aldoleopold.org/store/a-sand-county-almanac/>

workshop slide deck

PPEH, *Beyond Humans Workshop*

<https://my-climate-story.org/wp-content/uploads/2021/12/MCS-Beyond-Humans-Workshop-.pptx>

10,967 species on the International Union for the Conservation of Nature's Red List of Threatened Species

International Union for Conservation of Nature, *Species and Climate Change*

<https://www.iucn.org/resources/issues-briefs/species-and-climate-change>

Highlighted Resources

one in four species may very well be “committed to extinction.”

Nature, Extinction Risk From Climate Change

<https://www.nature.com/articles/nature02121#:~:text=For%20mid%2Drange%20climate%20change,are%20projected%20to%20become%20extinct.>

using a source you trust

Georgetown University Library, Evaluating Internet Resources

<https://www.library.georgetown.edu/tutorials/research-guides/evaluating-internet-content-contribution-form>

Consider sharing your

PPEH, Contribute Your Climate Story

<https://my-climate-story.org/contribute/>

MCS Instagram stories

PPEH, My Climate Story

https://www.instagram.com/my_climate_story/

National Wildlife Federation

The National Wildlife Federation, Climate Change

<https://www.nwf.org/educational-resources/wildlife-guide/threats-to-wildlife/climate-change>

Chapter 2

endangered species

International Union for Conservation of Nature, Species and climate change

<https://www.iucn.org/theme/species/our-work/species-and-climate-change>

sea level

NASA Global Climate Change, The Effects of Climate Change

<https://climate.nasa.gov/effects/>

Near

New York Times Magazine, Pollution Is Killing Black Americans. This Community Fought Back.

<https://www.nytimes.com/2020/07/28/magazine/pollution-philadelphia-black-americans.html>

Far

The New York Times, A Quarter of Bangladesh Is Flooded. Millions Have Lost Everything.

<https://www.nytimes.com/2020/07/30/climate/bangladesh-floods.html>

daily CO₂ levels rise

CO₂Earth, CO₂Records

<https://www.co2.earth/co2-records>

climate grief

BBC Future, *Climate Grief: How We Mourn a Changing Planet*

<https://www.bbc.com/future/article/20200402-climate-grief-mourning-loss-due-to-climate-change>

a “storybank”.

PPEH, *How To Tell and Share Your Story*

<https://my-climate-story.org/tell-and-share/>

browse and read

PPEH, *Browse the Storybank*

<https://my-climate-story.org/browse/>

this short story set in Massachusetts in the town of Ipswich

PPEH, *Anonymous Story (Ipswich)*

<https://my-climate-story.org/362-2/1756/>

available in fifteen languages

PPEH, *Multilingual My Climate Story Prompts*

<https://my-climate-story.org/resources/multilingual-my-climate-story-prompts/>

Chapter 3

newly unstable polar vortex

UC Davis, *Polar Vortex*

<https://climatechange.ucdavis.edu/climate/definitions/what-is-the-polar-vortex>

deep pockets

Union of Concerned Scientists, *Climate Disinformation*

<https://www.ucsusa.org/climate/disinformation>

Their own scientists

Inside Climate News, *Exxon: the Road Not Taken*

<https://insideclimatenews.org/book/exxon-the-road-not-taken/>

a climate disinformation campaign.

The Conversation, *A Brief History Of Fossil-Fuelled Climate Denial*

<https://theconversation.com/a-brief-history-of-fossil-fuelled-climate-denial-61273>

Highlighted Resources

to delay and distraction

Science News, *Climate Change Disinformation Is Evolving. So Are Efforts To Fight Back*

<https://www.sciencenews.org/article/climate-change-disinformation-denial-misinformation>

Their well-orchestrated campaign

Center for Climate Change Communication, *America Misled*

https://www.climatechangecommunication.org/wp-content/uploads/2019/10/America_Misled.pdf

“climate of silence.”

Journal of Environmental Psychology, *Climate Of Silence: Pluralistic Ignorance As A Barrier To Climate Change Discussion*

<https://www.sciencedirect.com/science/article/abs/pii/S027249441630038X?via%3Dihub>

great uncle

John Cook, *Cranky Uncle*

<https://crankyuncle.com/>

reading material that argues that because plants need carbon

The Conversation, *Yes, More Carbon Dioxide In The Atmosphere Helps Plants Grow, But It's No Excuse To Downplay Climate Change*

<https://theconversation.com/yes-more-carbon-dioxide-in-the-atmosphere-helps-plants-grow-but-its-no-excuse-to-downplay-climate-change-130603>

more on political views

PNAS, *Individuals With Greater Science Literacy And Education Have More Polarized Beliefs On Controversial Science Topics*

<https://www.pnas.org/content/114/36/9587>

level of education

Nature Climate Change, *The Polarizing Impact Of Science Literacy And Numeracy On Perceived Climate Change Risks*

https://climateaccess.org/system/files/Kahan_Polarizing%20Impact%20of%20Science%20Literacy.pdf

split more sharply

Science Communication, *Politicization and Polarization in Climate Change News Content, 1985-2017*

<https://journals.sagepub.com/doi/full/10.1177/1075547019900290>

young people in particular recognize that climate change is shaping their life stories

BBC News, *Climate Change: Young People Very Worried - Survey*

<https://www.bbc.com/news/world-58549373>

short guide to talking turkey and climate change by the Union of Concerned Scientists

Union of Concerned Scientists, *How to Talk About Climate Change at Thanksgiving: Recipes for Good Conversations*

<https://blog.ucsusa.org/aaron-huertas/how-to-talk-about-climate-change-at-thanksgiving-recipes-for-good-conversations-737/>

“seven ways to talk about climate change that almost all can agree on.”

TEDxMIT, *How To Have A Rational Conversation About Climate Change At Thanksgiving | Juan Enriquez*

https://www.ted.com/talks/juan_enriquez_seven_ways_to_have_a_rational_conversation_about_climate_change_over_thanksgiving_dinner?language=en

“how climate conversations with friends and family enter people into a ‘pro-climate social feedback loop.’

Young Evangelicals for Climate Action, *How to Talk About Climate Change at Thanksgiving Dinner feat. Dr. Katharine Hayhoe*

<https://www.youtube.com/watch?v=ew-1b03SX9o>

this graphic

PPEH, *S-I-S-R Climate Storytelling in 5 Steps*

<https://www.youtube.com/watch?v=ew-1b03SX9o>

Chapter 4

United Nations Conference of Parties (COP)

United Nations Climate Change, *What is A COP?*

<https://ukcop26.org/uk-presidency/what-is-a-cop/>

Paris Agreement

United Nations Climate Change, *The Paris Agreement*

<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

Nature, *Cop Architects Furious At Lack Of Climate Justice At Pivotal Summit*

<https://www.nature.com/articles/d41586-021-03088-z>

many negotiators

Nature, *Cop Architects Furious At Lack Of Climate Justice At Pivotal Summit*

Highlighted Resources

<https://www.nature.com/articles/d41586-021-03088-z>

prove us wrong

Sierra Club, "Prove Us Wrong": A Roundup of Some of the Best Speeches at COP26

<https://www.sierraclub.org/sierra/prove-us-wrong-roundup-some-best-speeches-cop26>

warmed by 3 degrees C

Carbon Brief, The Impacts Of Climate Change At 1.5c, 2c And Beyond

<https://interactive.carbonbrief.org/impacts-climate-change-one-point-five-degrees-two-degrees>

humans (and many other species) can't take the heat

Yale Climate Connections, 1.5 Or 2 Degrees Celsius Of Additional Global Warming: Does It Make A Difference?

<https://yaleclimateconnections.org/2021/08/1-5-or-2-degrees-celsius-of-additional-global-warming-does-it-make-a-difference/>

Study

Merchants of Doubt, How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming

<https://www.merchantsofdoubt.org>

Study

One Earth, Rhetoric And Frame Analysis Of Exxonmobil's Climate Change Communications

[https://www.cell.com/one-earth/fulltext/S2590-3322\(21\)00233-5#%20](https://www.cell.com/one-earth/fulltext/S2590-3322(21)00233-5#%20)

report

Frontline, Reporter Neela Banerjee On Exxon And Climate Change

<https://www.youtube.com/watch?v=tLIRQoJ1i4c>

report

Inside Climate News, Exxon: the Road Not Taken

<https://insideclimatenews.org/book/exxon-the-road-not-taken/>

Report

The Conversation, What Big Oil Knew About Climate Change, In Its Own Words

<https://theconversation.com/what-big-oil-knew-about-climate-change-in-its-own-words-170642>

delay climate action and to distract

BBC Future, Covid-19 Paused Climate Emissions – But They're Rising Again

<https://www.bbc.com/future/article/20210312-covid-19-paused-climate-emissions-but-theyre-rising-again>

climate inaction

Scientific American, *Climate Deniers Shift Tactics to 'Inactivism'*

<https://www.scientificamerican.com/article/climate-deniers-shift-tactics-to-inactivism/>

BP's Deepwater Horizon rig

U.S. Environmental Protection Agency, *Deepwater Horizon – BP Gulf of Mexico Oil Spill*

<https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill>

on their website

BP, *It's Time To Go On A Low Carbon Diet*

<https://web.archive.org/web/20060212090704/http://www.bp.com/sectiongenericarticle.do?categoryId=9005334&contentId=7009881>

science writer Mark Kaufman reported

Mashable, *The Carbon Footprint Sham*

<https://mashable.com/feature/carbon-footprint-pr-campaign-sham>

no difference in global warming.

BBC Future, *Covid-19 Paused Climate Emissions – But They're Rising Again*

<https://www.bbc.com/future/article/20210312-covid-19-paused-climate-emissions-but-theyre-rising-again>

human economic activities

Reuters, *Evidence For Man-Made Global Warming Hits 'gold Standard': Scientists*

<https://www.reuters.com/article/us-climatechange-temperatures/evidence-for-man-made-global-warming-hits-gold-standard-scientists-idUSKCN1QE1ZU>

Humans are causing climate change

NASA Global Climate Change, *Scientific Consensus: Earth's Climate Is Warming*

<https://climate.nasa.gov/scientific-consensus/>

the largest sources of carbon

Our World in Data, *Who Has Contributed Most To Global Co2 Emissions?*

<https://ourworldindata.org/contributed-most-global-co2>

around the globe

Global Citizen, *Why Climate Change and Poverty Are Inextricably Linked*

<https://www.globalcitizen.org/en/content/climate-change-is-connected-to-poverty/>

the United States

U.S. Environmental Protection Agency, *EPA Report Shows Disproportionate Impacts of Climate Change on Socially Vulnerable Populations in the United States*

Highlighted Resources

<https://www.epa.gov/newsreleases/epa-report-shows-disproportionate-impacts-climate-change-socially-vulnerable>

forcing climate migrations

Science, Biodiversity Redistribution Under Climate Change: Impacts On Ecosystems And Human Well-Being

<https://www.science.org/doi/10.1126/science.aai9214>

humans, animals, and plants

ProPublica, Climate Change Will Force a New American Migration

<https://www.propublica.org/article/climate-change-will-force-a-new-american-migration>

a powerful climate illiteracy campaign.

Union of Concerned Scientists, Climate Disinformation

<https://www.ucsusa.org/climate/disinformation>

30% more acidic

Yale Environment 360, Why Rising Acidification Poses a Special Peril for Warming Arctic Waters

<https://e360.yale.edu/features/why-rising-acidification-poses-a-special-peril-for-warming-arctic-waters>

fundamentally changing the cryosphere

UCAR Center for Science Education, Climate and Ice

<https://scied.ucar.edu/learning-zone/climate-change-impacts/climate-and-ice>

causing “wacky weather”

UCAR Center for Science Education, The Water Cycle and Climate Change

<https://scied.ucar.edu/learning-zone/climate-change-impacts/water-cycle-climate-change>

suffering and dying from heat stress.

Center for Climate and Energy Solutions, Heat Waves and Climate Change

<https://www.c2es.org/content/heat-waves-and-climate-change/>

Framework Convention on Climate Change (UNFCCC)

UNFCC, UNFCCC -- 25 Years of Effort and Achievement

<https://unfccc.int/timeline/>

a catastrophic pathway to 2.7°C

United Nations, Upcoming Climate Summit at Risk of Failure, Paris Targets Could ‘Go Up in Smoke’, Secretary-General Warns Major Economies Forum, Urging Coalition-Building

<https://www.un.org/press/en/2021/sgsm20908.doc.htm>

Select Titles for Further Reading and Listening

- Emily Atkins, *Heated: Accountability Journalism for the Climate Crisis*. <https://heated.world/>
Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene*, tr. David Fernbach (New York: Verso, 2017).
- Imani Jacqueline Brown, ed., *Black Ecologies*. Issue 2 of the journal *March* (St. Louis: The Luminaries, 2021).
- Nick Estes. *Our History Is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (New York: Verso, 2019).
- Christiana Figueres and Tom Rivett-Carnac, *The Future We Choose: Surviving the Climate Crisis* (New York: Alfred A. Knopf, 2020).
- Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable* (Chicago: University of Chicago Press, 2016).
- . *The Nutmeg's Curse: Parables for a Planet in Crisis* (Chicago: University of Chicago Press, 2021).
- Alexis Pauline Gumbs, *Undrowned: Black Feminist Lessons from Marine Mammals* (Chico, California: AK Press, 2020).
- Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, North Carolina: Duke University Press, 2016).
- Dale Jamieson. *Reason in a Dark Time: Why the Struggle Against Climate Change Failed—And What It Means for Our Future* (Oxford: Oxford University Press, 2014).
- Ayana Elizabeth Johnson and Katharine K. Wilkinson, eds., *All We Can Save: Truth, Courage, and Solutions for the Climate Crisis* (New York: Random House, 2021).
- Elizabeth Kolbert. *The Sixth Extinction: An Unnatural History* (New York: Henry Holt, 2014).
- . *Under a White Sky: The Nature of the Future* (New York: Random House, 2021).
- Simon L. Lewis and Mark A. Maslin, *The Human Planet: How We Created the Anthropocene* (New Haven: Yale University Press, 2018).
- Naomi Oreskes, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Climate Change* (New York: Bloomsbury, 2011).

Highlighted Resources

Naomi Oreskes and Erik M. Conway, *The Collapse of Western Civilization: A View from the Future* (New York: Columbia University Press, 2014).

Devi Lockwood, *1,001 Voices on Climate Change* (New York: Simon & Schuster, 2021).

Sarah Jaquette Ray, *A Field Guide to Climate Anxiety: How to Keep Your Cool on a Warming Planet* (Oakland, California: University of California Press, 2020).

Elizabeth Rush, *Rising: Dispatches from the New American Shore* (Minneapolis: Milkweed Editions, 2018).

Roy Scranton, *Learning to Die in the Anthropocene: Reflections on the End of a Civilization* (San Francisco: City Lights Books, 2015).

Anna Tsing et al, eds, *Arts of Living on a Damaged Planet* (Minneapolis: University of Minnesota Press, 2017).

David Wallace-Wells, *The Uninhabitable Earth: Life After Warming* (New York: Penguin Random House, 2019).

Bethany Wiggin, Carolyn Fornoff, and Patricia E. Kim, eds. *Timescales: Thinking across Ecological Temporalities* (Minneapolis: University of Minnesota Press, 2020).

Katie Worth, *Miseducation: How Climate Change Is Taught in America* (New York: Columbia Global Reports, 2021).

Audio

America Adapts: The Climate Change Podcast. <https://www.americaadapts.org/>

Broken Ground. <https://brokengroundpodcast.org/>

Climate One. <https://www.climateone.org/watch-and-listen/podcasts>

The Climate Question. <https://www.bbc.co.uk/programmes/w13xtvb6>

Drilled: A True Crime Podcast About Climate Change. <https://drillednews.com/podcast-2/>

Emergence Magazine Podcast. <https://emergencemagazine.org/podcast/>

For What It's Earth Podcast. <https://forwhatitsearch.podbean.com/>

Inherited. <https://www.inheritedpod.com/listen>

Life Raft. <https://www.npr.org/podcasts/930404467/life-raft>

Outrage and Optimism. <https://www.outrageandoptimism.org/>

Saltgrass Podcast. <https://saltgrasspodcast.com/>

Scene on Radio, Season 5: The Repair. <http://www.sceneonradio.org/>

Suggestions for Further Action

Share your story with your elected representatives in your town or city, your state and country. Check out these tips for writing to your rep. <https://climatejusticealliance.org/cja-advocacy-tool-kit/>

Learn more about other organizations that make up the climate movement. At PPEH, we appreciate so many! They range from older orgs -- World Wildlife Fund, Natural Resources Defense Council, Union of Concerned Scientists -- to younger -- 350.org, Sunrise, Fridays for Future.

www.worldwildlife.org
www.nrdc.org
www.ucsusa.org

www.350.org
www.sunrisemovement.org
www.fridaysforfuture.org

Encourage friends and family to get involved!

Help your school to educate for climate resilient futures.

We're in this together.

Additional Resources

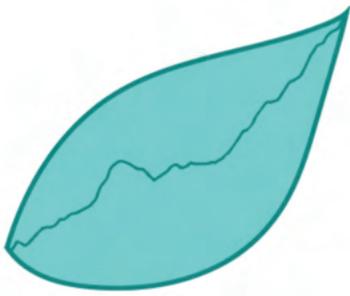
Workshop Slides <https://my-climate-story.org/resources/workshop-resources/>
How to Tell Climate Stories Beyond Humans
How to Tell Your Climate Story
How to Make Climate Conversations

Worksheets, pages 61-64
Beyond Humans Worksheet
My Climate Story Worksheet
Climate Conversations Worksheet
Pre-workshop Checklist

Materials for Workshop Facilitators, pages 65-71
If You Choose to Record a Workshop
Group Norms
Sample Climate Storytelling Workshop Icebreakers
Customizable Workshop Script



Climate workshop materials exist currently in English; Spanish-language scripts and slides are in development. They are available with the project resources at my-climate-story.org and in future editions of this workbook.



THANK YOU FOR SHARING YOUR BEYOND HUMANS STORY!

MY CLIMATE STORY

YOUR NAME

EMAIL

SPECIES COMMON NAME

SCIENTIFIC NAME

HABITAT

WHY DID YOU CHOOSE
THIS SPECIES?

HOW IS THIS SPECIES EXPERIENCING CLIMATE CHANGE?

ANY ADDITIONAL INTERESTING FACTS?

HOW DOES IT ALL MAKE YOU FEEL?



CIRCLE THOSE THAT BEST DESCRIBE YOUR CLIMATE STORY!

TOO HOT

TOO COLD

TOO MUCH WATER

NOT ENOUGH WATER

WACKY WEATHER

WILDFIRES

HOW HUMANS

ARE AFFECTED

HOW NONHUMANS ARE AFFECTED

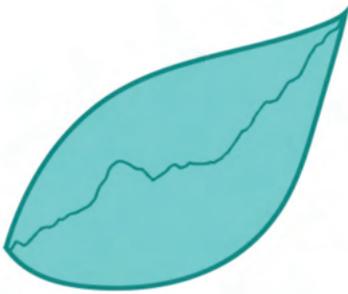
SUGGESTION

AFTER YOU CONTRIBUTE, PPEH WILL ADD YOUR STORY TO OUR PUBLIC STORYBANK AND MAY USE ON OUR PUBLIC CHANNELS. PPEH WILL NEVER PUBLISH YOUR EMAIL ADDRESS.

Feel free to attach drawings, links, or notes to this page. We are thrilled to share your story!

UPLOAD TO MY-CLIMATE-STORY.ORG OR SNAIL MAIL TO:

604 WILLIAMS HALL, 255 S. 36TH STREET
PHILADELPHIA, PA , 19104



THANK YOU FOR SHARING YOUR STORY!

MY CLIMATE STORY

YOUR NAME _____

EMAIL _____

WHERE DOES YOUR CLIMATE STORY TAKE PLACE? *Please add zip code, if possible!*

HOW HAVE YOU SENSED CLIMATE CHANGE?     

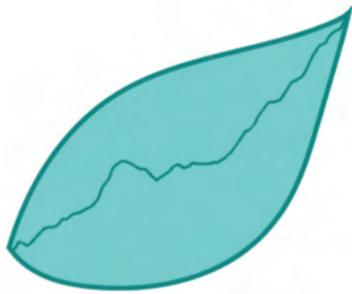
HOW DO THESE CHANGES MAKE YOU FEEL?        

CIRCLE THOSE THAT BEST DESCRIBE YOUR CLIMATE STORY!

TOO HOT **TOO COLD** **TOO MUCH WATER** **NOT ENOUGH WATER** **WACKY WEATHER** **WILDFIRES**
HOW HUMANS ARE AFFECTED **HOW NONHUMANS ARE AFFECTED** **SUGGESTION** _____

BY CONTRIBUTING, PPEH WILL ADD YOUR STORY TO OUR PUBLIC STORYBANK AND MAY USE ON OUR PUBLIC CHANNELS. PPEH WILL NEVER PUBLISH YOUR EMAIL ADDRESS.

Feel free to add drawings, links, or notes to this page. We are thrilled to share your story!



THANK YOU FOR SHARING YOUR CLIMATE CONVERSATION!

MY CLIMATE STORY

YOUR NAME

YOUR PARTNER'S NAME

WHERE DOES YOUR PARTNER'S CLIMATE STORY TAKE PLACE? (IF IT HAS A ZIP CODE, PLEASE ADD IT.)

WITH THEIR PERMISSION, PLEASE RECORD YOUR PARTNER'S CLIMATE STORY HERE:

IS YOUR PARTNER WILLING TO HAVE THEIR STORY SHARED TOWARD THE END OF THIS WORKSHOP?

YES NO OTHER _____

IS YOUR PARTNER WILLING TO HAVE THEIR STORY SHARED IN THE PPEH STORYBANK AND (POSSIBLY) ON SOCIAL MEDIA?

YES NO OTHER _____

CIRCLE THOSE THAT BEST DESCRIBE THIS CLIMATE STORY!

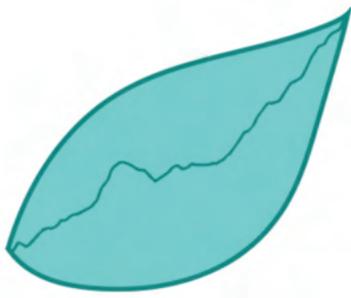
TOO HOT TOO COLD TOO MUCH WATER NOT ENOUGH WATER WACKY WEATHER WILDFIRES
HOW HUMANS ARE AFFECTED HOW NONHUMANS ARE AFFECTED SUGGESTION _____

BY CONTRIBUTING, PPEH WILL ADD THIS STORY TO OUR PUBLIC STORYBANK AND MAY USE ON OUR PUBLIC CHANNELS. PPEH WILL NEVER PUBLISH YOUR EMAIL ADDRESS.

Feel free to attach drawings, links, or notes to this page. We are thrilled to share your story!

UPLOAD TO MY-CLIMATE-STORY.ORG OR SNAIL MAIL TO:

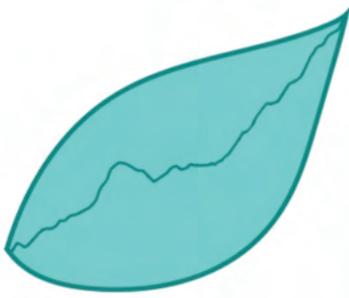
604 WILLIAMS HALL, 255 S. 36TH STREET
PHILADELPHIA, PA , 19104



PRE-WORKSHOP CHECKLIST

MY CLIMATE STORY

- Decide if you will be recording the workshop. If so, check out our "if you choose to record a workshop" sheet for tips.
- Craft your statement on group norms. Feel free to borrow or adapt this one.
- Create topical icebreakers. Here are some samples.
- Review the materials for the workshop you'll facilitate (presented in chapter 1, 2, and 3).
- Familiarize yourself with the further resources in this workbook and online that your group might use after the workshop.
- Remind yourself to hold space for the difficult emotions that may arise in these workshops.
- Reflect on every workshop's three main goals: guide the recognition of climate impacts, explore the emotions, and inspire climate action.
- Edit the workshop script to make it your own, keying it to the sample slides for your workshop.
- Modify sample slide deck for your workshop as needed and appropriate.



CLIMATE STORYTELLING IF YOU CHOOSE TO RECORD A WORKSHOP

MY CLIMATE STORY

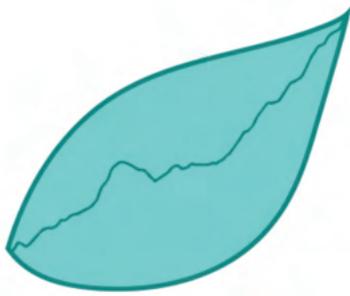
You may choose to record all of some of your climate storytelling workshop for your own purposes. Workshop participants must consent to being recorded in audio, video, or still images, and details how you will use this media.

If you are working with children (under 18 years old), a parent will need to provide consent on the child's behalf by signing for them. If you are working with people over 18 years old, they can sign for themselves.

HERE'S HOW WE ENSURE THAT WE HAVE CONSENT FOR STORYBANK SUBMISSIONS. MODIFY TO SUIT YOUR CIRCUMSTANCES BASED ON YOUR ORGANIZATION, PURPOSE, AND AGE GROUP.

By contributing, I agree to the following:

My story will be added to the My Climate Story public storybank, and PPEH may share my story, including any submitted media, across PPEH's public channels. This includes but is not limited to our social media, Field Notes blog, and any educational materials connected with the project.



SAMPLE CLIMATE STORYTELLING

GROUP NORMS

MY CLIMATE STORY

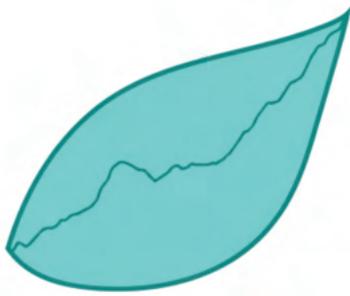
A good group norms statement lets participants know what is expected of them in terms of participation, while also making it clear that they can take breaks or opt-out when they need to.

At this stage in a workshop, you should also let participants know what to do if they are confused or if questions arise during the workshop. If you're meeting virtually and intend to record your workshop, be sure that everyone in the room knows that.

HERE'S A SAMPLE GROUP NORMS STATEMENT THAT WE'VE USED MANY IN RECORDED, ONLINE WORKSHOPS WITH HIGH SCHOOL STUDENTS. MODIFY TO SUIT YOUR CIRCUMSTANCES!

We encourage those of you who can to participate in this workshop with your cameras on. At the same time, we recognize that that may not be possible for everybody, for a variety of reasons: screen fatigue, bathroom break, things going on in the background... If you have any issues, please feel free to private message one of the workshop facilitators.

We will be recording today with those participants who provided a media release. Please remember that signing the release is your choice, and neither your standing in the class, nor your grade, will be impacted negatively if you choose not to participate in the recording section. You can simply mute your video. The small group work will not be recorded, and we suggest you turn your camera on so your partners can work with you more easily.



SAMPLE CLIMATE STORYTELLING WORKSHOP ICEBREAKERS

MY CLIMATE STORY

Icebreakers put participants at ease. They can be especially helpful with younger audiences, like schoolchildren, but they tend to work on everyone! Choose your questions to break the ice to match your audience, your location, the season, recent news events, etc. For older audiences, you might begin with a general question and then connect it to local climate impacts.

- Use a reaction or blink your camera off if you've seen a magnolia or tulip in bloom this week!
- Blink your camera on/off if you've spent 3 or more hours outside in the past week!
- What is a food you love that you can't have in every season?
- Add a word that describes what you want our energy future to look like.
- Do you think the recent weather is related to climate change? How can you find out?

Make It Yours! Stage Directions and Script for your Climate Storytelling workshop

Copy, paste, and re-write this script. Give it your voice.

You'll want to key it to accompany the slides for your workshop on *Beyond Humans, My Climate Story*, or *Climate Conversations*. These slides are available in the online storybank's resource section.

Introductions

Share your climate story, briefly, and explain why you're facilitating this workshop. Maybe you'll draw on the three main goals of every climate storytelling workshop and introduce yours. In virtual workshops, it can be particularly helpful to invite participants to share where they're calling in from.

Workshop Goals

Ask participants to offer a word about what they expect and hope for from your time together. Responses might include:

- I want to take a moment to learn about climate change
- I want to figure out what a climate story is--and what mine might be
- I want to learn how global climate is impacting my neighbors, my friends, my school, town, region
- I want to connect with the growing community of climate storytellers regionally and globally and contribute to this public research project.

Group Norms

A good group norms statement lets participants know what is expected of them in terms of participation, while also making it clear that they can take breaks or opt-out whenever they need to. At this stage, you should also let participants know what to do if they are confused or have questions during the workshop. If you're meeting virtually and intend to record your workshop, be sure that everyone in the room knows that.

Here's a sample group norms statement, we've used many in recorded online workshops with high school students:

We encourage those of you who can to participate in this workshop with your cameras on. At the same time, we recognize that that may not be possible for everybody, for a variety of reasons: screen fatigue, bathroom break, things going on in the background... If you have any issues, please feel free to private message one of the workshop facilitators.

We will be recording today with those participants who provided a media release. Please remember that signing the release is your choice, and neither your standing in the class, nor your grade, will be impacted negatively if you choose not to participate in the recording section. You can simply mute your video. The small group work will not be recorded, and we suggest you turn your camera on so your partners can work with you more easily.

Icebreakers

Icebreakers put participants at ease. They can be especially helpful with younger audiences, like schoolchildren, but they tend to work on everyone! Choose your questions to break the ice to match your audience, your location, the season, recent news events, etc. For older audiences, you might begin with a general question and then connect it to local climate impacts.

In an online workshop offered in April for professors at the University of Pennsylvania in Philadelphia, we used these ice breakers:

- Use a reaction if you've seen a magnolia or tulip in bloom this week!
- Blink your camera on/off if you've spent 3 or more hours outside in the past week!
- Blink your camera on/off if you've spent 3 or more hours today already on zoom!
- Drop a word in the chat that describes what you think our energy future at 2050 will look like?
- Add a word that describes what you want our energy future to look like.
- Use an emoticon to indicate if you think Penn's recently announced energy and investment plans will get us there.

With younger, tech-savvy audiences, it can be fun to play a game to break the ice. We like the smartphone applications Kahoot! and Poll Everywhere. If smartphones are not an option, then a mind map of answers drawn in real time (online or in person) is another good way to get a conversation going.

In an online workshop for high school students that placed special emphasis on climate and environmental justice, we broke the ice with a Kahoot!, a low-stakes quiz where answers are anonymous and ungraded:

- Multiple choice: A recent study found that African Americans were ___ percent more likely than other Americans to live in "fenceline communities," in neighborhoods located along the fences of heavy industrial and highly polluting facilities. (Answer: 75%)
- True or False: Public health researchers at Harvard's T.H. Chan School have found that even a small increase in particulate matter--invisible airborne particles emitted from power plants, industrial facilities, and most vehicles--correspond to a significant increase in Covid-19 mortality. (Answer: True)

- Multiple choice: Black Americans are exposed to ___ times as much of the sooty pollution that comes from burning fossil fuels than the population at large. (Answer: 1.5)
- Multiple choice: A 2018 survey conducted by Professor Dorceta Taylor at the University of Michigan found that White people make up ___ percent of the staff and boards of 2,057 environmental non-profits. (Answer: 85%)

Pre-Writing Activity 1: Climate Change and Local Impacts

Climate change is most often represented by numbers, not narratives, by quantitative rather than qualitative data, such as stories. Here are some helpful global and local numbers to keep in mind.

- Since 1800, global temperatures have risen by 2.0 degrees Fahrenheit.
- Since 1911, sea levels in New Jersey have risen 1.5 feet.
- Since 1980, the Philadelphia region has become 4 times more likely to experience an extreme hydrological event (very heavy rain, often in a short time, and flooding).

If you don't have the good luck to live in Philadelphia, include accurate climate-change information for your location. It is often discoverable with a simple google search for "Climate Impacts [Town, State, Country]." Be sure your source is up-to-date and comes from a reliable, science-based source.

Quiz-style questions can also be helpful for making sure that everyone in the room becomes familiar with some foundational definitions. In all workshops, we pose a few fundamentals of climate and ecological literacy as questions:

- What is the difference between climate and weather?
- What is causing our planet to warm?
- Why do we care about the climate?



Pre-Writing Activity 2: Defining a Climate Story

Work together to define a climate story. It offers a story of how climate impacts a person or a species; it might be autobiographical. All climate stories document local climate change using individuals' powers of observations, our senses and our feelings.

It's helpful to contrast a climate story with the big quant of conventional climate data. You might also ask workshop participants to mind map their ideas about what a climate story is and what it can do. What does a climate story convey that climate numbers don't? Begin with the short question: What is a climate story?

Share Writing Tips and Tricks

Introduce the S-I-S-R method for writing a climate story. It provides a launch pad to take off on a climate storytelling journey, and it helps to recall the basic elements of any climate story while you're in flight. You will also want to include additional instructions, depending on the kind of workshop that you're hosting:

For a Beyond Humans workshop, for example, it's important to provide your audience with a number of reliable sources (websites), where they can look up information about the species that they have chosen to write a climate story for.

For a *Climate Conversations* workshop, you will want to include instructions on interviewing someone and making a recording.

Worksheets for climate stories are super helpful to create drafts. They also allow for stories easily to be submitted to the Climate Storybank. Tagged with your participants' location, they're preserved and easily discoverable. It's up to you to decide how you want to collect the climate stories that are created in your workshop. How about: One simple method is to use the worksheets on pages 61-64 and send them via email or snail mail to the address listed. Or, each person can use the Contribute form on the *my-climate-story.org* website!

Let your participants start writing their climate stories.

Sit back and give them as much time as you can afford (we recommend about 10-15 minutes in a one-hour workshop). In our workshops, we often play music from our 'Playlist for the Crisis' (which includes songs about climate change) in the background while participants write. You might consider making your own playlist for the crisis or play this one.

Share-out

Finally, participants get to share their climate stories with the wider group. Make sure to ask participants how it felt to tell their climate story and give them a chance to reflect on the process. Structure your workshop in a way that will leave time for participants to talk about any emotions that may have come up while writing their Climate Story. Compassionate engagement and careful listening are crucial to every workshop.

Where can you take your story after the workshop? Offer next steps.

Always end a workshop with opportunities to stay involved. You might direct participants to the public storybank, where they can submit their climate stories to a digital archive that holds contributions from all over the world (<https://my-climate-story.org>). The climate stories in this database are tagged with useful metadata that categorize the stories according to the kinds of climate events or patterns that they describe (i.e. too hot, not enough water, whacky weather).

There are also lots of other climate projects and resources available for you and your group.





Bethany Wiggin is the Founding Director of the Penn Program in Environmental Humanities, an Associate Professor of German and member of the Graduate Groups in Comparative Literature and English at the University of Pennsylvania. Her scholarship explores histories of migration, language, and cultural translation since the Columbian exchange across the north Atlantic world; she is currently completing *Utopia Found and Lost in Penn's Woods*. Her collaborative projects engage audiences beyond the academy and have been supported by the National Geographic, Whiting, and Andrew W. Mellon Foundations.



Danny Cooper (he/him) is a recent graduate from the College of Arts Sciences where he majored in English and Environmental Science. He is originally from South Jersey and is now living in New York working as a paralegal. Danny has been with PPEH since January 2020 working as a Public Research Intern on the Climate Storytelling Team. He's loved watching the project evolve over time with input from our workshop's many participants of all ages and experiences. He is especially proud of the *Beyond Humans* workshop and knows how much we can learn from the species we share the planet with.



Connor Hardy worked on the PPEH Climate Storytelling Team from Summer 2020 through Summer 2021. They graduated from Penn with degrees in Global Health and Gender, Sexuality & Women's Studies. Connor is currently based in Belfast, where she is enrolled in a Conflict Transformation & Social Justice MA program at Queen's University. Connor loves storytelling, working with learners of all ages, and exploring how emotion shapes the stories we tell. In their free time, Connor volunteers as a full-spectrum doula, cooks, and reads.



Tsemone Ogbemi is a recent graduate of the College of Arts and Sciences at the University of Pennsylvania, where she majored in English and worked as a Public Research Intern at the Penn Program in Environmental Humanities. As a writer, Tsemone is interested in the connections between art and activism - particularly the potential of fiction to bring new and safer worlds into being through the power of imagination.

Contributors



Mia D'Avanza grew up running amok in the natural landscape of Florida. When she's not working at PPEH managing projects, creating and maintaining the digital archives, and editing the *Field Notes* blog, she explores her memories of the flora and fauna of that state in paintings that pay homage to the strange beauty and history of the region. Florida's freshwater springs, the Gulf of Mexico, and pine flatwoods are some of the landscapes she loves--landscapes that continue to rapidly change due to rising coastal waters and unchecked development.



Angela Faranda is a Program Coordinator for PPEH. With a background in Studio Art and Environmental Studies, her work includes design and administrative support for *My Climate Story*. As a lifelong Philadelphian, Angela can't wait to hear the stories and voices of this city.



Elle Powell is a multicultural American illustrator who emphatically believes we can make the world a better place through creative pursuits. She studied applied ethics for her Bachelor's Degree at Occidental College, then earned her Master of Fine Arts degree in illustration from the Savannah College of Art and Design. Elle has been a professional illustrator and designer since 2015, and has lectured and exhibited her work internationally. To see more, visit www.ellepowellart.com or @ellepowellart on Instagram.



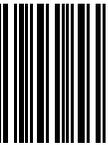
WHAT'S YOUR CLIMATE STORY?

PENN PROGRAM IN ENVIRONMENTAL HUMANITIES

ISBN 978-0-578-34437-9



90000>



9 780578 344379