

ENRICHMENT GUIDE

MAR 2-19

2022



Sea Sick

Written and Performed by Alanna Mitchell

Directed by Franco Boni, with Ravi Jain

Produced by The Theatre Centre

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Sea Sick

Enrichment Guide

Created & Compiled by The Theatre Centre and Ksenia Broda-Milian

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The Royal Manitoba Theatre Centre is proud to call Manitoba home. Royal MTC is located in Winnipeg on Treaty 1 land, the traditional territory of the Ininew, Anishinaabe and Dakota peoples, and the homeland of the Métis Nation. We are thankful for the benefits sharing this land has afforded us, and we are committed to the responsibilities of the Treaty. Hiy Hiy, Miigwetch, Wopida and Maarsii.

The Creators of *Sea Sick*

Playwright & Performer

Alanna Mitchell is an award-winning Canadian author and journalist who writes about science and social trends. Her international best-selling book *Sea Sick: The Global Ocean in Crisis* won the prestigious Grantham Prize for excellence in environmental journalism in 2010. With the help of The Theatre Centre's artistic director Franco Boni and Why Not Theatre's founding artistic director Ravi Jain, Mitchell turned *Sea Sick* into a one-



Alanna Mitchell. Photo by Chloe Ellingson

woman non-fiction play that she has performed across Canada and internationally, her first foray into theatre. She has written for the New York Times science section, National Geographic, Canadian Geographic, GQ Magazine India, Maclean's Magazine, Broadview Magazine, the Globe and Mail Newspaper, the Toronto Star Newspaper and is an award-winning radio documentary-maker for CBC Radio's Quirks & Quarks. Her fifth non-fiction book, *The Spinning Magnet*, about the Earth's magnetic field, came out last year. She is working on a play with Boni and Jain based on her fourth book, *Malignant Metaphor: Confronting Cancer Myths*. Its working title: *The Interview*.

Director

Franco Boni is the Artistic and Executive Director of the PuSh International Performing Arts Festival in Vancouver. Prior to this, he served as Artistic Director of The Theatre Centre in Toronto for 16 years. Franco has also served as Festival Director of the Rhubarb Festival at Buddies in Bad Times Theatre and Artistic Producer of the SummerWorks Theatre Festival. He is a recognized cultural innovator, facilitator and community builder with a demonstrated track record of restoring financial stability and artistic credibility to local arts organizations and festivals for over two decades. In 2019, he directed *Prophecy Fog* by Jani Lauzon at The Theatre Centre. He is the inaugural recipient of the Ken McDougall Award for emerging directors, was awarded the Rita Davies Cultural Leadership Award for outstanding leadership in the development of arts and culture in the City of Toronto, and in 2013 he received the George Luscombe Award for Mentorship in Professional Theatre.

Co-Director

Ravi Jain is a multi-award-winning artist known for making politically bold and accessible theatrical experiences in both small indie productions and large theatres. As the founding artistic director of Why Not Theatre, Ravi has established himself as an artistic leader for his inventive productions, international producing/collaborations and innovative producing models which are aimed to better support emerging artists to make money from their art. In all of his work, exemplified by projects like A Brimful of Asha and his reimagining of classics like Hamlet and Salt-Water Moon, is Ravi's passion to inspire Canadians to look at new ways of representing Canada on national and international stages. Currently he is working on a new adaptation of The Mahabharata with the Shaw Festival and a new project with Canadian writer Nicolas Billon on a new play titled CODE, which completed a one week residency at the Barbican Theatre in London, UK. Ravi has been shortlisted for the prestigious Siminovitch Prize (2016 / 2019) and won the 2012 Pauline McGibbon Award for Emerging Director and the 2016 Canada Council John Hirsch Prize for direction. He is a graduate of the two-year program at École Jacques Lecoq. theatrewhynot.org

Director's Note

In 2012, I was invited to attend Cape Farewell Canada's Carbon 14 Workshop. Scientists, journalists, business people, politicians, religious leaders and artists assembled at a waterfront location in Toronto to learn how we could collectively respond to the climate crisis. How could we work together to communicate the truth about climate change.

One of the most profound moments that weekend was listening to a talk by science journalist Alanna Mitchell. Her words hit me like a 'thunderbolt'. I remember leaving her talk feeling anxious and helpless. What could I do?

A year later, The Cape Farewell Canada Foundation and The Theatre Centre partnered to present a multi-arts festival that featured work by artists responding to issues of Climate Change. Together with Ravi Jain, we began working on a theatre piece that weaved Alanna's personal story with her journeys to learn what was happening to the global ocean. Sea Sick had its first public workshop at that Festival.

Sea Sick is an example of the critical role our cultural community and artists can play in communicating truth. That is what makes what we do so dangerous, because we have the ability to communicate a new cosmology.

Turning Science into Art

by Alanna Mitchell, 2014

So, how do you turn a science book about the ocean into a play? And, more to the point, why?

Well, that part of the story starts three years ago with the first expedition of the North American branch of Cape Farewell, a group inspired by the British visual artist David Buckland. David decided more than a decade ago that scientists knew about climate and ocean change, but that artists didn't, so he began putting them together. Often in the Arctic. Often on ships. Often stuck in the ice. It was hard to get away. So people talked.

And astonishing stuff started emerging. Music, avant-garde visual art, theatre, literature. After I met David for the first time, I read the British novelist Ian McEwan's book *Solar*, the first part of which is based on McEwan's own ice-fast Arctic adventures with David and others on one of the Cape Farewell journeys. It was hilarious. It was searing. It was all about climate change, slyly inserted into a rollicking good tale about a shady physicist.

So when David invited me to take part in a small North American version of the Arctic expedition – which took place, wryly, at the Palais Royal in Toronto overlooking Lake Ontario with a few dozen artists and scientists from all over the continent – I just said yes. Again, a raft of fascinating art has come out of that, culminating last fall with the Carbon 14 show at the Royal Ontario Museum.

But for myself, I wasn't expecting much. I was at the meeting simply as a source of information for the artists and, on the final morning of the meeting, as the final speaker, I tossed off a short talk about my adventures writing my book *Sea Sick*. Unbeknownst to me, however, Franco Boni, artistic director of The Theatre Centre, was in the audience.

That's when it really started to get interesting. Franco got in touch with me a few months later and asked me to give a talk to a bunch of theatre people who were gathering in Toronto for a conference. I remember it was a Sunday morning and I had a couple of other talks to give that afternoon but I really wanted to say yes to Franco and so I did. It turned out it was on a stage in the café in the basement of the Drake Hotel – lights and everything – and I confess perhaps I hammed it up a bit more than I do sometimes.

Well, a few months after that, I hear through Claire Sykes, who runs Cape Farewell in North America, that Franco wants me to turn my book into a one-woman show, with me as the performer. I thought he was crazy, but I met with them at a café on the Danforth. They were convincing. It would all be oral, they said. I would only have to tell my stories the way I

usually do, shape it a little bit, maybe fashion a new start and end, and voila! There would be our play.

I said yes. And then began the most difficult journey of my life. For months, Franco and Ravi Jain, the artistic director in residence and I met to talk about why. Why had I written about the ocean? Why had I gone on all those journeys? Why had I become a journalist? Why did the story mean so much to me? Why had I agreed to make a play?

I talked and talked and, because there was a blackboard in the makeshift office we were in, I would leap up from time to time to write stuff on the board, to show Franco and Ravi what I meant. And every time I would explain something, either Franco or Ravi would say: "There's more." And I would try again. It was like being enveloped in a world of tough intellect and tougher love. There was no hiding.

Eventually, it all came down to this: Why does art matter?

My hope is that you'll find some answers in our play. It's what we grappled with for all those months.

And I came out of it convinced that we won't find the solutions we need for this high-carbon world we've created until we rewrite the story about how it all ends, and rewrite how we feel about that. So ultimately, the answer lies in culture. In emotion and psychology and all the other things that make us uniquely human. In art, that is to say, which has the potential to take us on journeys we could never take any other way.

The play didn't turn out the way Franco promised, by the way. It is not just oral. At a fateful point in the process, I transcribed the tapes we were making of the play and then, we had a script – all 10,000 words of it – and we starting honing it, making it leaner and clearer. And then – worst thing of all – I had to remember all those words, all in order. Pure hell for a journalist, who's trained never to tell the story the same way twice!

Content Overview

As *Sea Sick* deals with the realities of climate change, it may bring up anxiety or other strong feelings. There is no strong language or blasphemy used. Sex is mentioned in the context of animal reproduction – bird mating dances and coral spawning.

Plot Summary

Alanna Mitchell is a prairie girl who's afraid of water, so she might not be the most obvious person to talk about the ocean. But she's also an award-winning journalist and like all good reporters, she follows her curiosity. Her journey takes us around the world, face to face with some of the brightest minds on the planet, and into a watery abyss. Alanna tells us about growing up on the prairies and introduces us to the work of brilliant scientists past and present. She brings us along on her journey around the world and into the depths of the ocean, in pursuit of understanding its impact on humans, and ours on the waters. A hard-hitting but ultimately hopeful experience inspired by her bestselling book.

Contextual Background

The difference between weather and climate

The United States National Oceans Service explains very simply “climate is what you expect, weather is what you get.” While the weather is the specific conditions you see outside each day, a climate is an average of that weather over time and space in terms of temperature, precipitation, and other factors. Climate is concerned with how the atmosphere “behaves” for an extended period of time. The United Nations says “Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas.” Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures. The Earth is a system, and this rise in temperatures is raising sea levels, and changing precipitation and other local climate conditions. Land, air, and water all over the planet are affected in many ways: intense droughts, changing crop yields, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity. From the UN: Climate change can affect our health, ability to grow food, housing, safety and work. Some of us are already more vulnerable to climate impacts, such as people living in small island nations and other developing countries. In the future, the number of “climate refugees” is expected to rise.

Classroom Resource: A list of reviewed research, lessons and activities related to climate change from NASA features several organizations is available here:

<https://climate.nasa.gov/resources/education/>

Ocean Acidification

The ocean absorbs about 30% of the carbon dioxide (CO₂) in our atmosphere. As CO₂ levels rise in the air from greenhouse gas emissions, the levels in the ocean rise too. Chemical reactions between CO₂ and seawater lead to an excess of hydrogen ions – the ocean gets more acidic. More acidic waters mean certain fish have trouble detecting their predators. When these species are at risk, the food web is thrown out of balance. These chemical reactions also lead to a deficit of the compound calcium carbonate. Without enough, organisms like coral, oysters, clams, and sea urchins have difficulty building or maintaining their shells and structures. What does this mean for people? Anytime that the world's food webs are at risk, so are our lifestyles and livelihoods. Many economies are dependent on fish and shellfish, and people worldwide rely on food from the ocean as their primary source of protein.

Classroom Resources: Illustrate how the ocean absorbs CO₂ gas with these two experiments of “ocean acidification in a cup” by [creating a miniature ocean and atmosphere](#) or [blowing carbon dioxide into the water](#) – and if you need to, you can [learn how to make a red cabbage pH indicator](#) to show the acidity. You can [also observe how acidic water effects calcium carbonate](#) using a seashell or chalk.

Environmental Journalism

Environmental journalists specialize in gathering and presenting newsworthy information in a timely way. Just like any journalist, they write, film and transcribe reports, commentaries, and features. An environmental journalist does research, investigates issues, interviews, and goes on journeys – like Alanna – so that they can raise awareness of affairs related to nature and the environment, especially the impacts of human activity on the environment. This can be crucial to members of the public developing opinions on actions their governments can take, which can influence policy. These journalists are a conduit between scientists and the general public, finding out information, interpreting it a way that makes sense to people, and highlighting why it is important. There is also an element of advocacy in environmental journalism: not only bringing problems to light but sharing what can be done about it by companies, governments, and individuals.

Classroom Resource: StoryMaker is a free learning platform developed by PBS NewsHour that provides resources for students and lessons for teachers to guide the next generation of journalists. Browse [lesson plans for journalism exploration here](#) and [dive deeper into StoryMaker with all its updates and features](#).

The Scientists of Sea Sick

Provided by The Theatre Centre

[Charles Darwin](#)

[George Mitchell](#)

[Sylvia Earle](#)

[Nancy Knowlton](#)

[Stu Ludsin](#)

[Joanie Kleyapas](#)

[Carol Turley](#)

[Tim Flannery](#)

[Amy Wright](#)

Further Reading

Provided by The Theatre Centre

Sea Sick: The Global Ocean in Crisis, Alanna Mitchell, McClelland & Stewart, 2009

Praise for the book:

“Alanna Mitchell has brilliantly woven together the threads of science taking pace all over the world pointing to an accelerating crisis in the world’s oceans...The climate crisis is more an ocean crisis. That she still finds reasons to hope is one reason you must read this book.”

– Elizabeth May

“A riveting book of revelations about earth’s largest and most important habitat.”

– Australian biologist and author Tim Flannery

“Sea Sick is the most comprehensive book to date on the state of our oceans. With a writer’s eye for detail and a reporter’s expertise in pulling in disparate information, Mitchell has woven a powerful and deeply unsettling story about our collective abuse of the cradle of all life. Fortunately, she also gives us hope and a path forward if we have the wisdom to act.”

– Maude Barlow

Dancing at the Dead Sea: Tracking the World’s Environmental Hotspots, Alanna Mitchell, Key Porter Books, 2004

The Weather Makers: how we are changing the weather and what it means for life on Earth, Tim Flannery, HarperCollins, 2006
Here on Earth: A Natural History of the Planet, Tim Flannery, HarperCollins, 2010

Storms of My Grandchildren: The Truth About the Coming Climate Catastrophe and our Last Chance to Save Humanity, James Hansen, Bloomsbury, 2009

Citizens of the Sea: Wondrous Creatures from the Census of Marine Life, Nancy Knowlton, National Geographic, 2010

Blue Hope: Exploring and Caring for Earth’s Magnificent Ocean, Sylvia Earle, National Geographic, 2014

The World Without Us, Alan Weisman, HarperCollins, 2008
The Geography of Hope: A tour of the world we need, Chris Turner, Vintage, 2008

Charles Darwin’s Beagle Diary, ed. R.D. Keynes, Cambridge University Press, 1988.

Further Reading for Young People

The following links provide book lists about climate change and ocean conservation for various age groups.

[Picture book list from Rebekah Gienapp](#)

[12 Children's Books About Climate Change from Feminist Books for Kids](#)

[Books recommended by climate activists, from Teen Vogue](#)

[Climate change reads for young adults from the Hampshire Library](#)

Curriculum Connections

Attending Royal MTC's production of *Sea Sick* and discussing it will fit into the Manitoba Senior Year curricula in science, social studies, Global Issues, English Language Arts, and drama.

Drama

DR–C1 The learner develops understandings about people and practices in the dramatic arts.

DR–C2 The learner develops understandings about the influence and impact of the dramatic arts.

DR–C3 The learner develops understandings about the roles, purposes, and meanings of the dramatic arts.

DR–R1 The learner generates initial reactions to drama/theatre experiences.

DR–R2 The learner critically observes and describes drama/theatre experiences.

English Language Arts

1.1.2 Consider Others' Ideas

2.2.1 Experience Various Texts

2.2.2 Connect Self, Texts, and Culture

2.2.3 Appreciate the Artistry of Texts

2.3.1 Forms and Genres

3.3.4 Develop New Understanding

4.4.3 Attentive Viewing and Listening

5.2.2 Relate Texts to Culture

5.2.3 Appreciate Diversity

Global Issues

Areas of Inquiry

- Climate Change
- Environment
- Gender
- Indigenous Peoples, Global Issues, and Sustainability

Enduring Understandings

- Our ecological footprint is exceeding Earth's capacity to sustain biodiversity and human life.
- Our decisions and actions matter; they have social, environmental, economic, and political consequences.
- Individuals, groups, governments, and corporations have the power to effect change and the responsibility to contribute to a sustainable future.
- Economic and technological development has contributed greatly to society, but often with harmful human and environmental consequences.

Social Studies

9.2.4 Citizenship and Participation

9.4.4 Taking our Place in the Global Village

S2.2.3 Sustainable Development

S2.5.3 Environmental and Economic Issues

Science

Grade 7 Cluster 1: Interactions within Ecosystems

Grade 8 Cluster 4: Water

S2-4-07 Investigate and evaluate evidence that climate change occurs naturally and can be influenced by human activities.

S2-4-08 Discuss potential consequences of climate change.

S1-0-9e Be sensitive and responsible in maintaining a balance between the needs of humans and a sustainable environment.

Grade 12 Biology: Biodiversity

Current Topics in the Sciences

SLO B5: Identify and demonstrate actions that promote a sustainable environment, society, and economy, both locally and globally.

Sources

<https://eco.ca/career-profiles/environmental-reporter/>

<https://www.iberdrola.com/culture/environmental-journalism>

https://www.nasa.gov/mission_pages/noaa-n/climate/climate_weather.html

https://oceanservice.noaa.gov/facts/weather_climate.html

<https://www.un.org/en/climatechange/what-is-climate-change>

<https://climate.nasa.gov/resources/global-warming-vs-climate-change/>

<https://www.noaa.gov/education/resource-collections/ocean-coasts/ocean-acidification>

<https://oceanservice.noaa.gov/facts/acidification.html>

Theatre Etiquette

Arrive Early: Latecomers may not be admitted to a performance. Please make sure you give yourself enough time to find your seat before the performance starts.

Cell Phones and Other Electronic Devices: Please **TURN OFF** your cell phones/iPods/gaming systems/cameras/smart watches. Texting, surfing, and gaming during performances is very distracting for the performers and other audience members. Using cameras and recording devices during a performance is never allowed.

Talking During the Performance: Even when you whisper, you can be heard by the actors onstage and the audience around you. Unless you are at a relaxed performance, disruptive patrons will be removed from the theatre. Please wait until after the performance to share your words with others.

Food/Drinks: Food and outside drinks are not allowed in the theatre. When there is an intermission, snacks and drinks may be available for purchase. There is complimentary water in the lobby.

Dress: There is no dress code at the Royal Manitoba Theatre Centre, but we respectfully ask you not to wear hats in the theatre. We also strive to be a scent-free environment, and thank all patrons for their cooperation.

Leaving During the Performance: If an audience member leaves the theatre during a performance, they will be readmitted at the discretion of Front of House staff. If they are readmitted, they will not be ushered back to their original seat, but placed in an empty seat at the back of the auditorium.

Being Asked to Leave: The theatre staff has, and will exercise, the right to ask any member of the audience to leave if that person is being disruptive. Inappropriate and disruptive behaviour includes, but is not limited to: talking, using electronic devices, cameras, laser pointers, or other devices that produce light or sound, and deliberately interfering with an actor or the performance (tripping, throwing items on or near the stage, etc.).

Enjoy the show: Laugh, applaud, cheer and respond to the performance appropriately. Make sure to thank all the artists for their hard work with applause during the curtain call.