KAMAGITUARLAVUT



AYALIK AND HER JOURNEY

WHAT IS IT AND WHY

DOES IT MATTER?

ACTIVITY ZONE WORD SEARCH, DID YOU KNOW, AND MORE!



This magazine is for the youth of Nunavut who are interested in learning about climate change and making a difference in their community. We want to hear what you think about this issue and what you want to see in future issues. Email us at elimatechange@gov.nu.ea.

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Climate Change

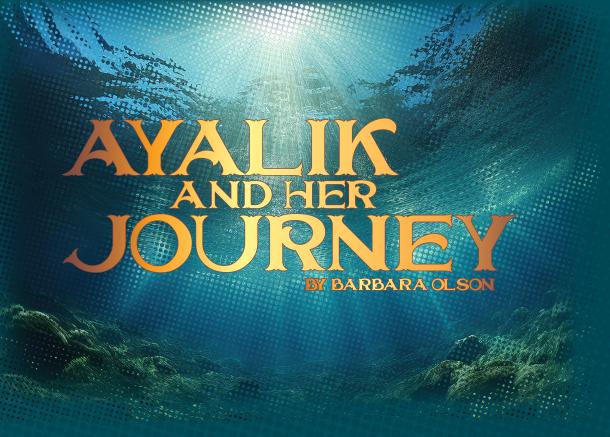


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IN THIS ISSUE...





n their walk home from school, Ayalik and her friends passed around the year-end awards she received for science and avatittinnik kamatsiarniq, admiring them. Ayalik was eager to begin high school in the fall. She wanted to have a career like her ataatatsiaq, a wildlife officer, who taught her how to hunt and fish from a young age. He also taught her to love and care for the animals of the land, the birds of the sky, and the fish of the sea.

When Ayalik got home, her ataatatsiaq was already outside packing the boat. Ayalik put her backpack on the porch, the awards forgotten, and went to help him. Ayalik was always excited to go on hunting and fishing trips with her ataatatsiaq. It meant she could

drive the boat. Ayalik loved to drive anything with an engine—quads, snowmobiles, boats—it didn't matter.

They launched the boat under a cloud of mosquitos. Ayalik idled the boat out to deeper water before opening the throttle. The sudden breeze provided a welcome relief from the bugs and the heat. The heat was unfamiliar because, after all, they were in the Arctic. The cold wind could not stifle Ayalik's yawn. She had been so excited for her last day of middle school that she kept tossing and turning in bed the previous night, unable to sleep.

Earlier that week, Ayalik and her ataatatsiaq had set fishing nets but so far, they had not caught anything. No char or grayling or even whitefish. Hopefully today would be different. Routine took over when they reached

the first set of nets. Ayalik moved the boat into position while Ataatatsiaq hauled in the net. It was empty. Ayalik fought to stay awake as she drove to the next location. She was tired. It was boring hauling empty nets day after day. When Ataatatsiaq began pulling in the net, she closed her eyes. Just for a moment, she promised herself. Instead, she fell forward, gunning the motor and almost throwing Ataatatsiaq from the boat. After righting himself, he insisted on taking the helm.

"Sleep," he told Ayalik with a small smile.

Ayalik curled up on the floor and slept. She dreamed she was wearing the magic kalikuq Ataatatsiaq kept in his closet that had been passed down through the family for generations. He said its intricate design of seal claws, loon feathers, and whale beads called on the northern lights and could take you to other realms. Ayalik already knew what she wanted to do with the kalikuq. She would visit Sedna, the goddess of the sea. Sedna gave or withheld the creatures of the sea at her pleasure. Ayalik would beg Sedna to release the fish so that her ataatatsiag's nets would be filled. But first, Ayalik needed to dig into her ataatatsiag's cache for gifts of fur and meat because Sedna wished for gifts from beyond her reach.

The journey felt like it took forever, but it was only seconds. Sedna suddenly appeared before her in the depths of the ocean. Her long hair ebbed and flowed around her head and torso like seaweed. Ayalik shyly held out her gifts of fur and meat and asked Sedna to release the fish. Sedna looked at the gifts but did not

take them. She beckoned Ayalik to come closer.

"Look at my hair," she said. "See the damage you do."

Ayalik looked. She saw the pop cans, plastic, and shopping bags tangled in Sedna's hair. She also saw the fish and sea mammals. Sedna's hair had grown so long and messy, spanning for miles, that all the creatures of the sea had been caught in it

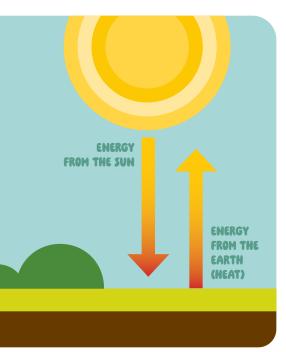
Ashamed, Ayalik apologized for her people's carelessness. She promised to advocate for a community cleanup. From the front pocket of the kalikuq, she took a comb and began untangling Sedna's hair. As she combed and braided each strand, more and more fish were released.

The goddess of the sea was pleased when she finished, but she warned Ayalik, "I will take the sea creatures back if you do not keep your promise." She also added that Ayalik must come back again to braid her hair.

Ayalik awoke to her ataatatsiaq laughing. Yawning, she sat up and looked over the edge of the boat. They had come up to the last net, but this time all she could see were the end buoys. The *puptat* that held the net level were beneath the water. Ayalik quickly took over the tiller while her ataatatsiaq pulled in the heavy net. It was full of different kinds of fish! How happy she was. She was excited to feed many people from her community and to ask them to help her with keeping her promise to Sedna.

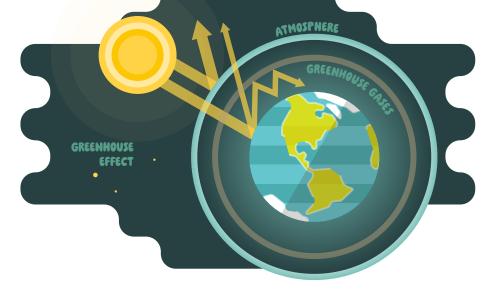
CHANGE WHAT IS IT AND WHY DOES IT MATTER? BY ASHLEY GILAVAG-SAVAR

et's learn about climate change! What is the Earth's climate? What is the difference between weather and climate? In a single day, the weather might call for rain, snow, and sunshine. Weather is ever changing, hour by hour, day by day, week by week. Climate is the long-term weather pattern in a specific area. The climate in the Arctic is often characterized as having cooler temperatures, long cold winters and short cool summers compared to the rest of Canada's climate, which varies from coast to coast.



The Sun and Earth both give off energy. Energy balance is when the incoming energy from the Sun matches the outgoing energy from the Earth (heat). When the energy from the Sun and the Earth are in balance, our climate is stable. When there is a big difference between how much energy is coming from the Sun and the Earth, this causes the Earth to warm or cool. The Earth's warming and cooling is known as climate change.

A greenhouse is a person-made building made of glass or see-though plastic designed to trap incoming heat (solar radiation) and keep the humidity (plant and soil moisture) inside to help the plants grow. When we burn fossil fuels such as oil, gas and coal, greenhouse gases are released into the atmosphere, creating a barrier around the earth. If you take that idea of a greenhouse and imagine it on a massive scale, the barrier around the earth's atmosphere created by greenhouse gases traps heat in our atmosphere. This is called the greenhouse effect. The same thing happens inside earth's atmosphere as it does inside a greenhouse—it gets hot and humid. While there are a number of ways to keep a greenhouse cool, we can't do that with the earth's atmosphere, so it will continue to get warmer as we continue to burn fossil fuels and release more greenhouse gases, adding to our greenhouse gas emissions.

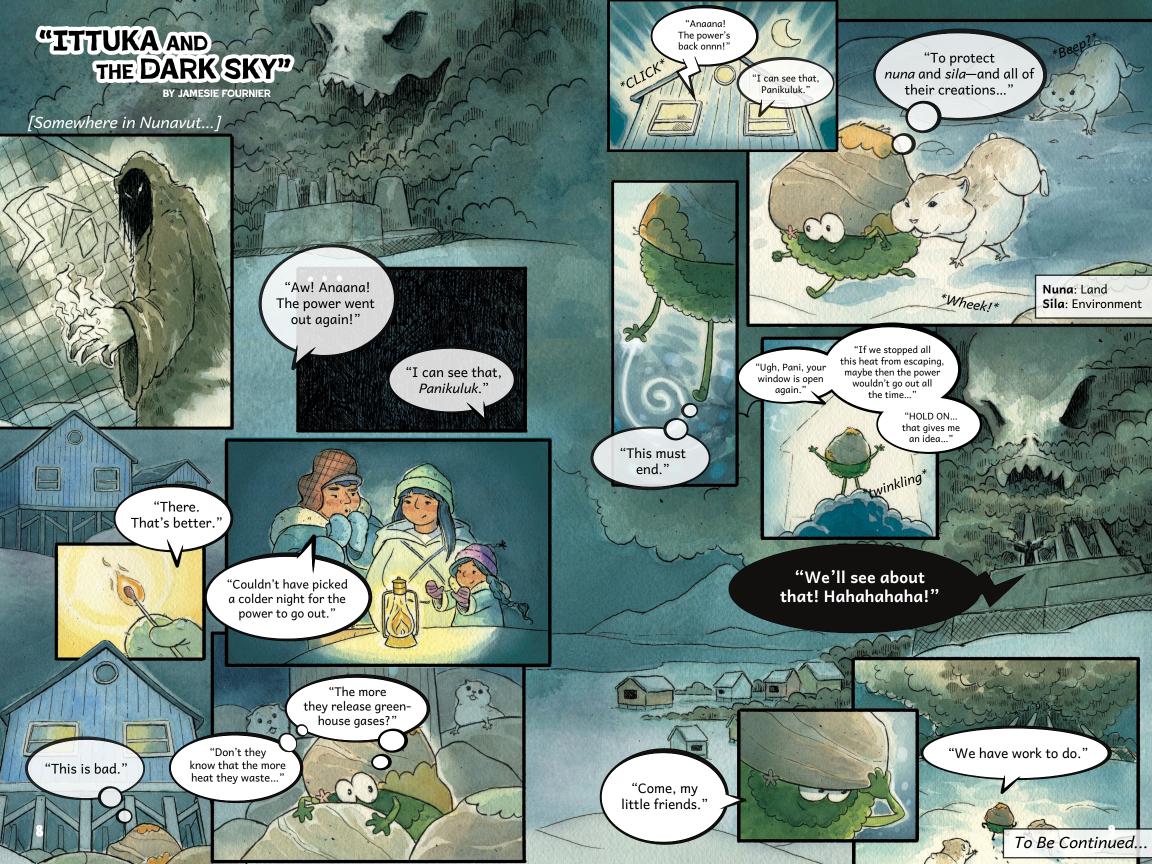


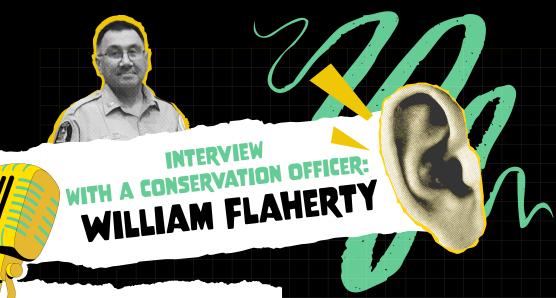
Climate data is collected by scientists and climate activists all over the world. They have determined that the climate is changing, Earth's atmosphere and the oceans are warming at an alarming pace, and it is affecting our climate and everyday life on a global scale.

Climate change has affected weather patterns, animal migration routes, and plant growth. Warmer weather has introduced new invasive species, thawing permafrost, and infrastructure damage, and it has affected our ability to read the weather properly.

There are many strong, capable, compassionate humans out there who are actively fighting climate change at every level. Indigenous people, scientists, artists, and policy makers are coming together to raise awareness about climate change, its impacts, and the many ways we can adapt to our changing climate, prevent future changes, and reduce our environmental impact. It all starts with coming together, sharing our stories and learning from each other.







What does a conservation officer do in Nunavut?

It's something different every day. In the morning, I could be doing my monthend or occurrence reports, attendance, or any paperwork that I need to catch up on. And in the afternoon, I could go on patrol on a snowmobile or the boat. I could get calls about a dead raven or a bear or any occurrence that comes along in our community.

Have you noticed any changes in the behaviour of local wildlife?

Yes. Because the temperatures are different now, we're getting more southern species going up to the North. I'm talking about the salmon, the robins, the killer whales, the moose, and new insects.

How does climate change affect plants, animals, and people in your community?

Climate change is really happening. I can see it. I can tell that it has happened because we do get severe winds. The weather patterns-they're not the same as they used to be back then. We could have very strong winds and very warm temperatures on what is supposed to be the coldest time of the year. Now it could be raining. Ice is not forming. It's not how it used to be. It's much later now. It used to form around October. Sometimes freighter ships will be leaving our Igaluit port in December.

What are the biggest challenges of climate change for Nunavummiut?

The main impact due to climate change that I have noticed is the weather and how dangerous it can be. More people are falling through the ice on snowmobiles. One time I recorded a very strong, IIO kilometre wind that blew some of the rooftops off our houses in Iqaluit.

How are Nunavummiut adapting to climate change?

Some of us, including myself, are using solar panels. All the cabin owners in the communities are starting to realize this is environmentally friendly and that it doesn't cost you anything. I'm starting to see that more and more.

How would you recommend young Nunavummuit help take care of the environment?

That's a good question: "How do we help you in dealing with climate change?" Education. Hands-on training, take them out on the land. Use presentations, pictures, and storytelling to show them how it used to be. There's so much to talk about with climate change. For us, we used to be the eyes and ears of the North. But now we smell and touch climate change, right? Forest fires, you can smell them now; pollution; the gas from the jets.

Are there any final words you'd like to say on the topic of climate change?

Climate change in the circumpolar region is happening now. It's affecting everybody. Not just the people, but the wildlife, plants, the ecosystem, everything.

WORD SEARCH

Find the following words in the puzzle. The words can be hidden in any direction: horizontally (left to right and right to left), vertically (top to bottom and bottom to top), and diagonally.



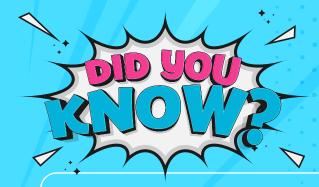
Methane **Emissions**

Conservation

Atmosphere Wildlife

Carbon **Permafrost Avatittinnik kamatsiarniq**

Greenhouse gas Climate change



Everyone can help fight climate change by making small changes in their daily lives, like turning off lights and appliances when they're not needed, recycling cans and plastic, or walking and bicycling instead of riding in a car.

Due to rising temperatures, permafrost in Nunavut is starting to thaw. This can cause the ground to become soft. affecting buildings, roads, and airports.

The Arctic is warming three times as fast as the rest of the planet! This means that the sea ice is melting. affecting animals and travel.



Climate change leads to more severe weather events. like blizzards, increased snowfall, heatwaves. floods, and wildfires.



- greenhouse gases always
 - Yes, because they destroy the ozone layer
 - Yes, because they cause pollution
 - No, because they reflect sunlight
 - No, they are necessary to keep the Earth warm
- Vhat is the primary cause of ecent global climate change?
 - The Earth's natural cycles
 - Volcanic eruptions
 - Human activities such as burning fossil fuels
 - Changes in the sun's energy output

- low does the greenhouse effect elp stabilize Éarth's climate?
 - By blocking all sunlight from reaching the Earth's surface
 - b) By trapping some of the Earth's heat and preventing it from escaping into space
 - By reflecting all heat back into space
 - By increasing the Earth's rotation speed
- Vhat word describes the efforts o protect plants and animals from the effects of climate change?
 - Adaptation
 - Mitigation
 - Preservation
 - Conservation
- Vhat is one thing humans can do o help protect the environment?
 - Use plastic bags for grocery shopping
 - Drive a car instead of walking or bicycling
 - Recycle and use reusable products
 - Leave all the lights on at home when you're at work or school

SPOT THE DIFFERENCE

There are 11 differences between these two pictures. Can you find them all?



