

The Weather Cabinet

Weather is everywhere where you are, changing every minute, every day, all around the Earth since... forever. Weather is also more than just rain, wind, clouds, rainbows, sunshine or lightning. It affects our mood, what we do, what we wear, where we go, and what we eat.

And we talk about the weather a lot.

Weather is hidden in the smell of decaying autumn leaves and in the touch of sun's rays on your skin. It flows in freezing air filling your lungs and takes your breath away when you look at a fiery sunset. Weather is as exciting as jumping into a cold lake, as sweet and sour as an apple eaten under the tree, as nostalgic as reading a book by candlelight during cold and dark winter evenings...

Before people invented all kinds of meteorological instruments to help them measure and predict the weather, they had to rely on observations and memories and on storytelling to pass the knowledge from one to another.

With Weather Cabinet I wish to encourage curiosity and wonder for the smallest everyday things that might sometimes be overlooked.

Oulu, 17th January 2022 Michaela Casková

Weather Cabinet, including this booklet, is an artwork encouraging weather observation by Michaela Casková (b. 1988, Czechoslovakia). She is a visual artist, an art educator, a designer, a nomadic gardener and a forager who keeps an eye on atmospheric events, everydayness and weather that we all share. Walking, observing, asking, talking, being in silence, listening, imagining, picking, foraging, mapping and drawing are some of her tools.

Motivated by processes of connecting, sharing, doing, being and learning together she keeps moving between different collaborative and interdisciplinary projects.

Michaela is an active member of the Mustarinda association, Hyrynsalmi, Kainuu.

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The Weather Cabinet includes:

- 2 folding doors with watercolour artworks inside
- 9 sliding frames with paintings pressed between them
- 2 sliding drawers with small treasures to wonder and observe
- 1 sliding drawer with a booklet including weather diary notes, stories about weather and tips for indoor and outdoor activities around the themes of the Weather Cabinet

How to use the cabinet?

The cabinet should be placed on a table before opening the doors. Due to its compact size it needs to be looked at up close. Exploring the cabinet in daycare can be done in small groups together with an accompanying adult.

Some of the things inside are fragile. The sliding discs and the drawers (except the drawer with the booklet) are built-in and cannot be taken out of the cabinet.

What is this booklet for?

The booklet you are holding in your hands is a guide to Weather Cabinet that provides ideas and tools for exploring both the cabinet and the weather.

The booklet includes:

- Short texts about seasonal weather with ideas and tips for indoor and outdoor activities.
- Selected weather notes from the artist's weather diaries that she has been keeping daily since 2016 when she moved to Finland.
- A colour chart of inks that the author has made of materials berries, herbs, leaves, mushrooms, barks, clay foraged on her wanderings in forests, meadows, seashores, any environment really. Most of the works in the cabinet have been painted with them and have been inspired by small or big daily stories of encountering weather.

SPRING

What is a colour? To see colour, you must have light. Without light there is no colour.

At this time of the year, we are starting to get more sunlight. The sun is also melting the snow and more colours start to appear. It is the perfect time to observe how important our main source of light and warmth – the Sun – is for life on Earth.

Colours start to appear with growing grass, leaves on trees, the soil, and the first flowers. Soon after snow has melted away another sign of life arrives: migratory birds return from their long journeys to warmer places in the south. They are here, ready to feed on awakened insects and start their nesting season.

Did you know that insects are great meteorologists? On warm days before a storm, they can be restless, butterflies flying somewhere to hide before raindrops and bees staying closer to beehives.

And you? Are you perhaps sometimes tired

when it is too hot? Or hungry when it is too cold? Sleepy when it is raining? Or full of energy when the sun is shining?

Tips for activity:

· Observing the seasons change

Choose a place (a tree, a plant, a stone) and start a tradition of walking there regularly to observe what is happening in different seasons and in different weather conditions. The spot could also become a festive venue for celebrating and observing sunlight during spring equinox, summer solstice, autumn equinox and winter solstice.

Weather diary

Start your own weather diary together as a group and observe the weather. Your weather diary can be very simple with symbols such as cloud, raindrop, snowflake and sun drawn into a calendar every morning. You can also talk about clothes and other equipment such as hats, umbrellas and sunglasses that are needed for playing outdoors in specific weather.

SUMMER

What makes pinecones open? And when do ants open their windows?

Pinecones open in dry weather when the sun is shining, and the conditions are perfect for releasing the seeds to the wind. They close in wet weather, and they can do this repeatedly when waiting for the right moment to release their seeds.

Blooming plants also open and close their petals. Many flowers stay open during sunny days to welcome pollinators to a sweet pollen feast, and close during night and rainy days. However, some flowers open in the dark for night flyers such as moths.

Ants are also great weather guides. They are very busy and important workers. They spread seeds and mushroom spores while running errands. Ants also open their windows – tiny finger-sized holes all around ant hill – when the weather is sunny and dry, and close them when rain is coming.

And what about earthworms? They are gar-

dener's friends and keep busy fluffing the ground and helping to create humus, rich soil full of nutrients. Earthworms also predict rain. They escape their flooding underground tunnels, which is why you can see them strolling on the surface waiting for the rain to stop before they dive back to continue creating nutritious soil.

What do you do when it is sunny? What do you do when it rains?

Is there a change in light, smell, temperature or sound when the weather is changing?

Tips for activity:

Natural inks

In the summer there are many berries and other fruits and vegetables growing. Many plants are rich in colour. For example, blueberries, green leaves and flower petals can be used for painting on paper or on the ground just by squeezing them between fingers and pressing towards the surface.

Collect grass, soil, bark and berries from outdoors (or the kitchen!), anything you can

leave a mark with. Take a big sheet of paper or some used sheet fabric and try to draw and paint with the natural materials you collected. What kind of marks do they leave?

• You can also make your own ink from natural materials and paint with it on paper with brushes.

Recipe for homemade ink:

- 1. Pour 2 cups of water into a saucepan and add 1 cup of plant-based material (leaves, roots, peels). If you use berries or any other material which contains a lot of liquid, do exactly the opposite: 1 cup of water + 2 cups of berries.
- 2. Add 2 teaspoons of vinegar + 1 teaspoon of salt.

Warm it up, but do not boil (aim for 70–80°C). Keep cooking for approximately 2 hours and stir from time to time.

After 2 hours turn off the heat and let it cool down. Filter the liquid through a strainer or through a cloth, if the organic particles are tiny. Pour the ink into clean glass jars and add 1 clove as preservative. Store the inks in the fridge for up to one year.

AUTUMN

What are the movements of autumn? What is sensitive to weather changes? Maybe your toes and fingers?

In the early autumn the harvest season is in full swing. The forest is humid and full of everything – colourful leaves, motion, shapes, sizes and movements. Animals are busy with winter preparations. Many birds are gathering energy to make their long journey south.

Many creatures are sensitive to the local climate. One of them is a mysterious organism called lichen. Lichens are everywhere and their presence can indicate clean air. Look around and see if you can find some growing on a stone or a tree, or even on the walls and the roofs of houses?

Now in the autumn you might meet the earthworms again – maybe in the garden while harvesting potatoes. Even though the earthworm does not have eyes, it can feel the sun and sense the upcoming winter. When

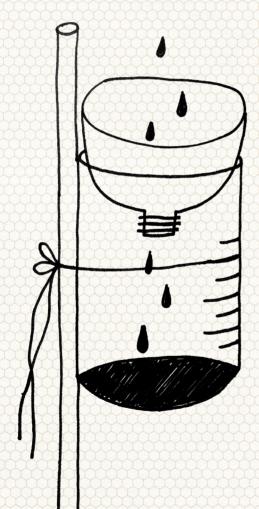
days become shorter and shorter, earthworms dig deeper into the ground, roll into tiny balls and stay there until spring.

What other creatures are busy building shelters and looking for places to stay safe until spring comes again? Where do the bear, the fox, the snake and the rabbit hide in winter? Where do you hide when it is cold or rainy?

Tips for activity:

- Rain gauge
- 1. Cut the top section of empty plastic bottle as shown.
- 2. Invert the top of the bottle into a funnel that forms the rain gauge and attach the pieces together by using a strong tape.
- 3. Place the rain gauge outside in an open area. Plant a wooden stick into the ground and fasten the rain gauge to it, so that the wind does not carry it away.
- 4. Wait for the next rain. After the rain, measure the amount of rainfall you got with a ruler. You can empty the gauge after each measuring.
- 5. Ideally you should come and have a look

every 24 hours, but this can of course be improvised!



WINTER

What is a cloud? Can you run through the cloud?

What is snow? Why is it so fluffy and quiet outside in the wintertime?

How can you tell if it is going to rain? Can you see your breath? Can you make clouds?

We get a lot of precipitation during wintertime. And it all comes down as water in its different states, shapes, sizes and intensities.

Clouds are formed already on the surface of the ground. Warm air rises up and then cools down high in the sky. You may not see it, but all around there are teeny-tiny water droplets gathering. They are so small and light that they float around in the air. Then they fly up and come together – and that is what you can see as clouds! Sometimes the clouds are so low that they touch the ground, and you can even run through them. That is what we call fog.

Clouds that are very white and very high are formed of crystals, frozen droplets of water, because it is freezing cold up there! When the small droplets and crystals collect too much water, they suddenly become too heavy, cannot hang up there anymore and fall back from sky towards the ground. That is what we know as snow, rain, drizzle, sleet or hail.

It is so nice to jump into a fresh blanket of snow. It is like jumping on a cloud. In a fresh layer of snow, a lot of space is taken by air. It is the air between the little crystals of snowflakes that mutes the sound like a big woollen blanket. Snow also protects the soil from freezing, insulates the ground, takes care of ground humidity and warmth, and keeps the plants safe.

When it is about to rain people close their windows, and after the rain the air is colder. It is time to put on some extra layers of clothes and put your rubber shoes, raincoat and umbrella next to the door. It is always exciting to go out after the rain no matter what season it is. In the spring and the

summer, the rain is very different from winter. In the spring birds start to sing right after a shower of rain, and you can feel how fresh the air is when all the pollen and the dust has been washed away.

Tips for activity:

Make a cloud!

When it is cold enough and you blow warm air into the cold air outside, you are making clouds (yes, your breath is the wind now!). That is almost exactly how the clouds you see in the sky are made.

Measure the snow depth

You can measure precipitation also in the winter. This time of the year it is quite common to get snow showers instead of raindrops. You can install a simple wooden stick with centimetres marked on it in an open area on the yard and see how the snow layer is growing or melting.

Weather diary

Excerpts from weather diaries written by artist Michaela Casková during the past few years.

13/2/2017

+3 °C, 65 cm of snow, Mustarinda, Kainuu Sunny, windy. Clouds are vastly moving across the sky. Lower clouds are coming from the west and upper clouds from north. Snow fell down the roof. Trees lost their snowy cover and suddenly we can see some colours! There is always something sad about snow melting. There is always something sad about warm weather in midwinter.

12/3/2018

0.2 °C / -2.1 °C, 5 m/s, 22 cm of snow, Kallio, Helsinki
Partly cloudy. I cannot see from my window for the next couple of months. The house will be under construction and the windows are covered with plastic foil. Greenhouse feeling. Swans have returned to Utö island. 14:17 snowstorm. Spring equinox celebration is coming soon.

29/4/2017

-7 °C / -8.3 °C, 2 m/s, 101 cm of snow, Mustarinda, Kainuu Bright and sunny day. The eyes hurt from

Bright and sunny day. The eyes hurt from the sun's reflection from snow even indoors and I need to use sunglasses even in my studio. I go and spread some ashes over the snow that covers the garden to make the snow melt quicker so we can start gardening hopefully already before the beginning of June.

29/5/2017

9 °C / 0.2 °C, 3 m/s, 16cm of snow, Mustarinda, Kainuu Still very cold at night and I keep wearing a winter hat and a warm jacket, but the snow melts fast. The herb spirals are already visible in the garden. Longer and brighter days. I must hang a curtain in my room to be able to sleep. Birds are arriving from the south, but there are no insects yet. It is a bit worrying if the birds are here, hungry after a long journey, and there is not much food for them. 20/7/2019
21 °C / 8.3 °C, 1 m/s, Kainuu
Summer is back and I am going to Suolijärvi to visit N. Scything and raking
– hay day! Later in the evening I planted
some sweet cicely next to the greenhouse.

23/8/2019

20 °C, Mustarinda, Kainuu All kinds of clouds and weather today. Sunny, windy, cloudy, rainy, stormy. I went for a quick swim to Lake Ypykkä – it is always a bit of a cold dip even in the summer. Around the lake I collected several kilos of red-banded webcaps into plastic bags, ready for dying wool and making pigments. No juniper berries found around here, surprisingly.

17/10/2020

8.1 °C / 3.6 °C, 3 m/s, Suomenlinna, Helsinki

It has been a surprisingly warm autumn with almost no rainy days so far. Until today – but even today it has been only a couple of short showers. The larch in

front of my studio in Lapinlahti is still not changing colour to yellow (maybe after the first frost?). I am collecting cones under a black alder tree, boiling some fallen leaves, beetroot and avocado peels, and learning from Astri how to make watercolours and crayons of my own pigments. Breath-taking wind in some parts of the island. Rosehip almost ready to forage. Heavy rain came in the night.

12/11/2020

0.4 °C, 100 % humidity, 1 m/s, 3 cm of snow, Mustarinda, Kainuu It was foggy in the morning but there was some sunshine right before the sunset. It is also very humid, and the snow on the ground is melting into slush. The smell of the air reminds me of spring. All is silent and still. You can hear only melting frost dropping down the roof. About 10 grey and blue tits are now regulars on bird feeders. P. Is taking good care of them.

Colour chart

Samples of colours used in the artworks in the Weather Cabinet. Many of them are selfmade inks and paints foraged and extracted from natural materials by the artist.



Credits

Weather Cabinet / Säätämö-minitaidekaappi

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