

Prof. Falkenmark's Fun School

Fifth issue, March 2020

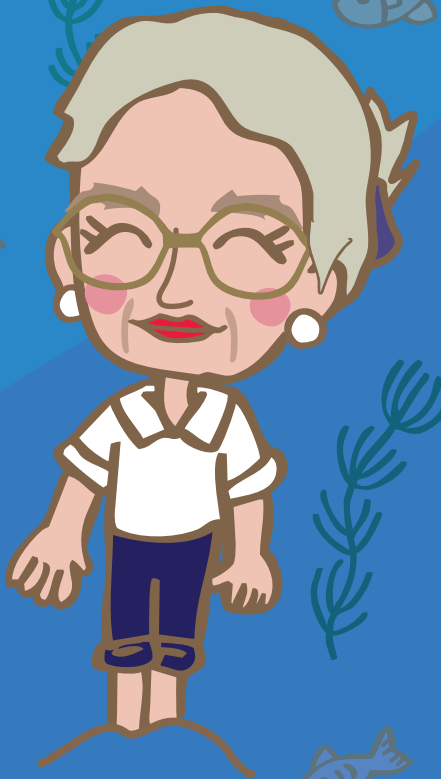


I'm Gring, and this is my friend Woodin. We are working to protect the Earth's environment.



Today, we are in Sweden with Prof. Falkenmark, playing in the river!

Playing in the water is pleasant and so much fun!



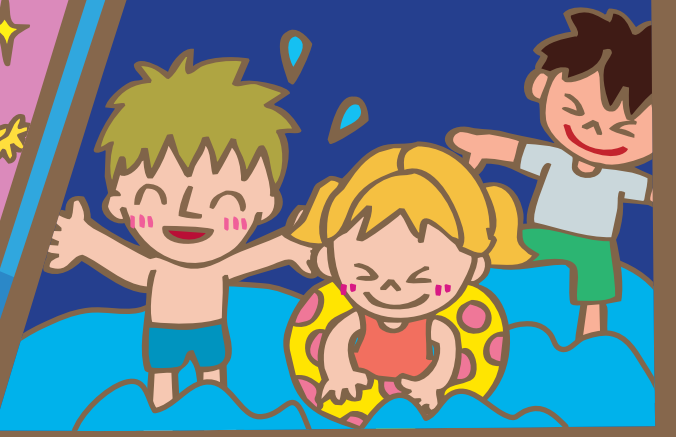
Prof. Falkenmark has been studying water for more than 60 years.



2018 Winner of the Blue Planet Prize



Swedish children love playing in the water, too.



Sweden is a country with a lot of rivers and lakes.



Children and grown-ups enjoy swimming, fishing and



boat rides.



The summer in Sweden is short, so everyone tries to have as much fun as possible during summer.

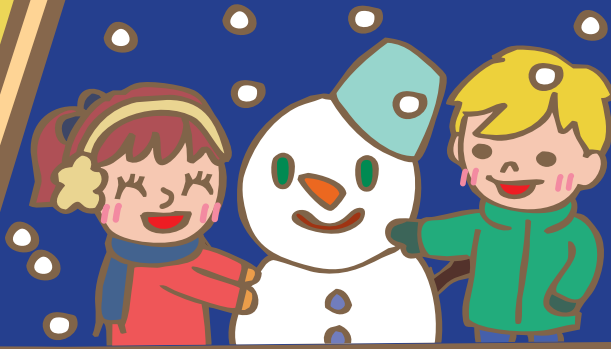


HAPPY SUMMER TIME

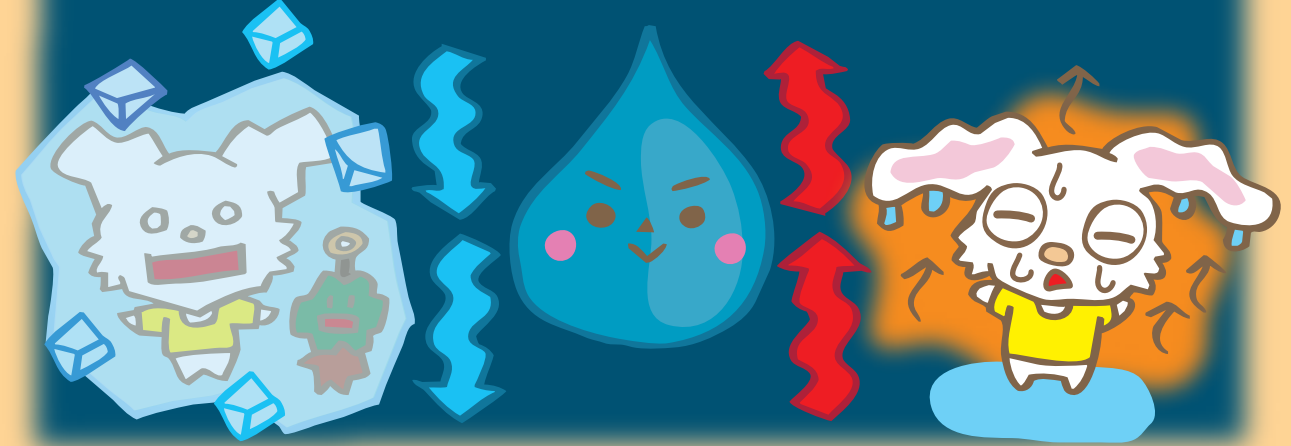
Every summer, people from around the world come to Sweden for an event* to discuss water issues.



Winter is also fun!
In a cold country, they have snow in winter.



Water becomes ice when it cools down.
It evaporates and turns into water vapor when heated up.

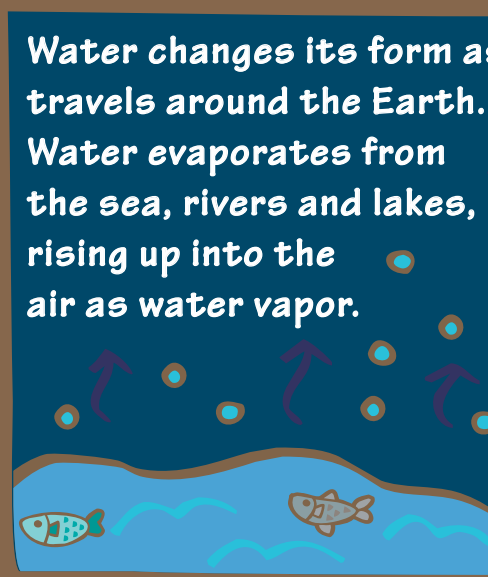


*World Water Week organized by Stockholm International Water Institute

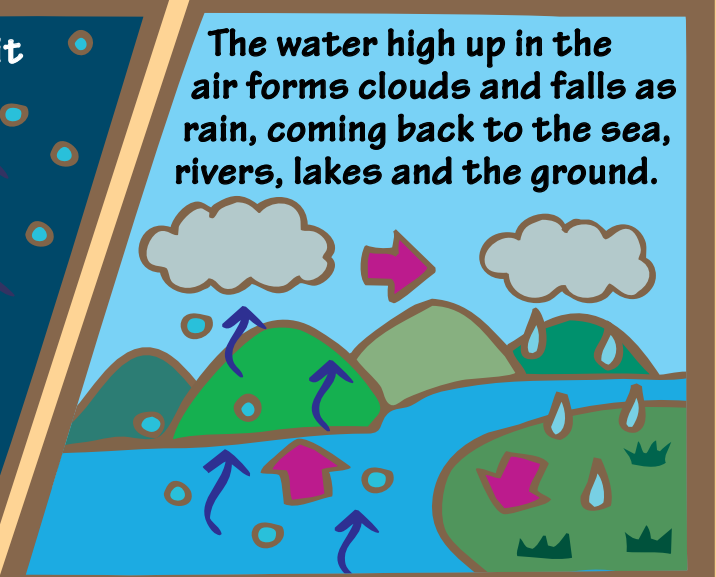
When rivers and lakes freeze, they can enjoy sledding and skating.



Water changes its form as it travels around the Earth.
Water evaporates from the sea, rivers and lakes, rising up into the air as water vapor.



The water high up in the air forms clouds and falls as rain, coming back to the sea, rivers, lakes and the ground.



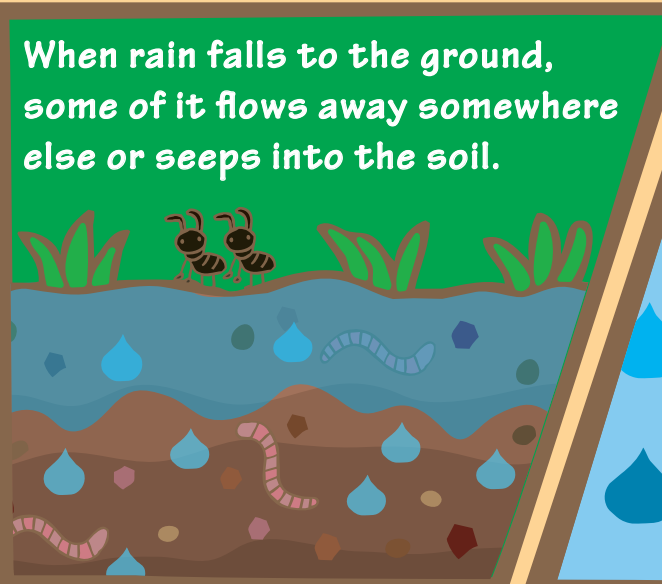
It sounds so fun!

It's amazing that we can stand on frozen river water.

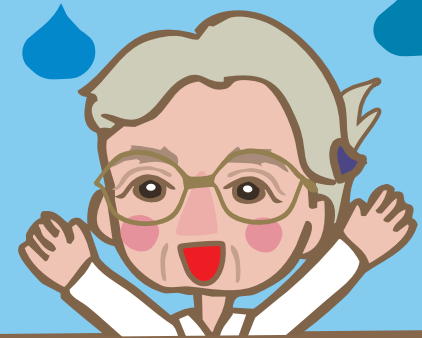
That's right.
Water can change into various forms.



When rain falls to the ground, some of it flows away somewhere else or seeps into the soil.



The water that has seeped into the soil is invisible but very important.



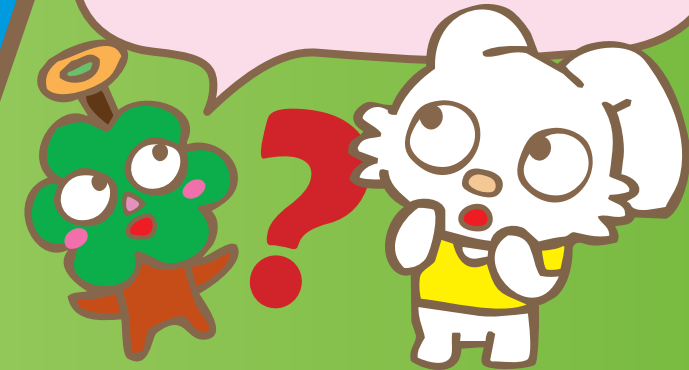
This water in the soil helps grass, trees and other plants grow.



That means we humans can't live without green water.



I see, but if there is no green water in the soil, like in desert areas, maybe we can give the river's blue water to the fields?



I named this water in the soil "green water,"



and river water "blue water."

You can do that in places where there is plenty of water, like in Egypt.



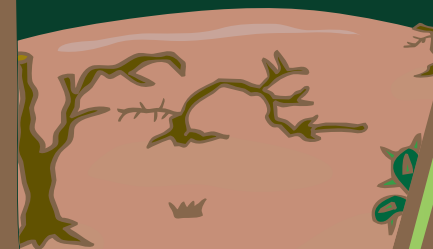
But the river's blue water is also necessary for humans to drink or use for other purposes.



Grains and vegetables we eat everyday also grow using green water in the soil.



In Africa and some other regions, water is in short supply, so it can't be used for the fields.



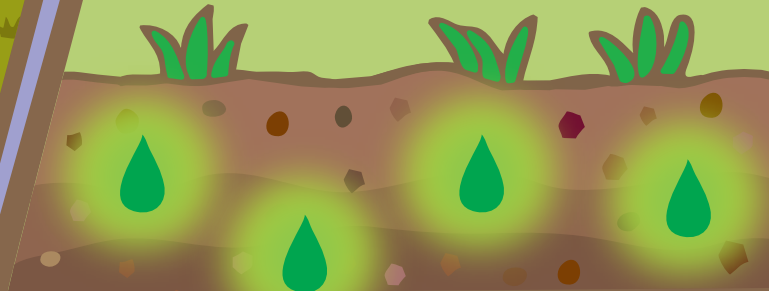
But in those places, if you use green water carefully, you can grow grains and vegetables without relying on blue water.



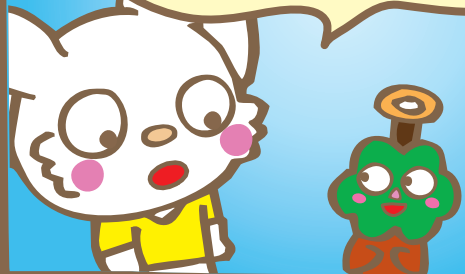
For example, if you plow a field only in the narrow part where you plant seeds,



green water is less likely to evaporate away than when you plow the entire field, so you can keep green water longer in the field.



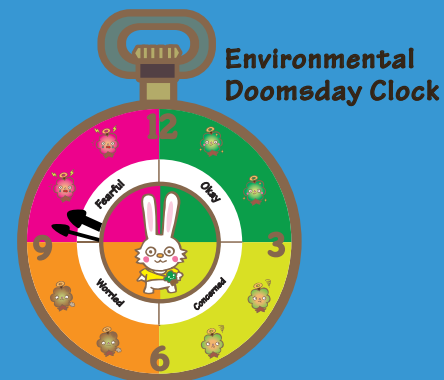
I thought I knew all about water, but everything was new to me.



We need to think more of not just visible water, but also the invisible water in the soil.



Thank you very much, Prof. Falkenmark.



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