

## *Who is Saving Whom – Bringing In The Pollen From Lodgepole Pine*

Text by Camilla Berner

Translation: Mette Romme

The Lodgepole Pine - *Pinus Contorta*- is a pine tree introduced in Thy in the late 1800s - early 1900s from Northern America. It was planned to protect the land from sand drifts, a result of overexploitation of the land and a problem for farmers in the area.

The Lodgepole Pine has the ability, in its native habitat, to establish itself quickly after wildfires and grow in nutrient poor environments, like the sandy soils in Thy.

While the sand drifting ceased, the Lodge Pine developed so well under these latitudes, that it consequently became the invasive species well known today. The problem has not been resolved since Thy became a National park and an area of special protection of native species of flora, as well as fauna, in connection to the particular landscape type of dune heaths. No longer a problem for the farmers cultivating their land, now modern man is needed to protect the ecosystem and its biodiversity. This cultural- and natural history is a good example of how, for the first time in human history, we have the ability to think and interact with nature according to its own values. To not only think about fulfilling our basic needs but more what is needed in our relationship to nature.

The Lodgepole Pine, like any other pine, sends out an abnormal amount of pollen, which is seen both on the ground and in the air. Pollen is the sperm cell, multiplying the plant. A process completed by reaching the female flowers, placed at the far end at the new shoots, like small, purple, beautiful and attractive buds. Through time they will grow into cones, eventually creating seeds for new plants. The pollen of the Lodgepole pine is spread by the wind and the great quantities are there to guarantee that some of it will land in the right place.

As a result, most of it lands on the ground and with time becomes legible in geological layers of the Earth. Pollen are small microfossils and the oldest of them were brought with the wind and can be dated back millions of years ago. Interestingly, it is possible in archaeological excavations, from samples of core-drillings in the ground, to get a precise image of how the flora was in a particular area, from up to 10.000 years ago. By comparing drill core samples, from different places one can get an exact mapping of the migration of plants and the changes that have taken place locally as well as in larger geographical areas. In a greater picture and during a geological time, we see a very dynamic nature with great changes caused by both humans and a changing climate. However, the story of the Lodgepole Pine shows that we as humans act from another much more short-sighted time perspective; our own longevity. What seemed appropriate when we wanted to save ourselves and our livelihood from the sand-drifts, seemed as a

great success back then. Today we save ourselves and the native species, but in fact we don't know whether it is the eternal truth....

In reality, pollen is probably more known for something completely different than sperm cells and microfossils; pollen allergy. Pollen is part of the yearly life cycle of plants in nature - also here the ecosystem is a well-planned fine mesh, but it is also an ugly recur

The Lodgepole Pine - *Pinus Contorta*- is a pine tree introduced in Thy in the late 1800s - early 1900s from Northern America. It was planned to protect the land from sand drifts, a result of overexploitation of the land and a problem for farmers in the area.

The Lodgepole Pine has the ability, in its native habitat, to establish itself quickly after wildfires and grow in nutrient poor environments, like the sandy soils in Thy.

While the sand drifting ceased, the Lodge Pine developed so well under these latitudes, that it consequently became the invasive species well known today. The problem has not been resolved since Thy became a National park and an area of special protection of native species of flora, as well as fauna, in connection to the particular landscape type of dune heaths. No longer a problem for the farmers cultivating their land, now modern man is needed to protect the ecosystem and its biodiversity. This cultural- and natural history is a good example of how, for the first time in human history, we have the ability to think and interact with nature according to its own values. To not only think about fulfilling our basic needs but more what is needed in our relationship to nature.

The Lodgepole Pine, like any other pine, sends out an abnormal amount of pollen, which is seen both on the ground and in the air. Pollen is the sperm cell, multiplying the plant. A process completed by reaching the female flowers, placed at the far end at the new shoots, like small, purple, beautiful and attractive buds. Through time they will grow into cones, eventually creating seeds for new plants. The pollen of the Lodgepole pine is spread by the wind and the great quantities are there to guarantee that some of it will land in the right place.

As a result, most of it lands on the ground and with time becomes legible in geological layers of the Earth. Pollen are small microfossils and the oldest of them were brought with the wind and can be dated back millions of years ago. Interestingly, it is possible in archaeological excavations, from samples of core-drillings in the ground, to get a precise image of how the flora was in a particular area, from up to 10.000 years ago. By comparing drill core samples, from different places one can get an exact mapping of the migration of plants and the changes that have taken place locally as well as in larger geographical areas. In a greater picture and during a geological time, we see a very dynamic nature with great changes caused by both humans and a changing climate. However, the story of the Lodgepole Pine shows that we as humans act from another much more short-sighted time perspective; our own longevity. What seemed appropriate

when we wanted to save ourselves and our livelihood from the sand-drifts, seemed as a great success back then. Today we save ourselves and the native species, but in fact we don't know whether it is the eternal truth....

In reality, pollen is probably more known for something completely different than sperm cells and microfossils; pollen allergy. Pollen is part of the yearly life cycle of plants in nature - also here the ecosystem is a well-planned fine mesh, but it is also an ugly recurring evil for many people, whose immune system misinterprets and reacts against pollen. We talk about pollen allergy like never before, and during these times we also embrace nature more than ever. A process that has been reinforced by Covid-19. On one hand, we have realised at record speed how unhealthy the state of the world is and how much more space we have to give nature, to avoid as many epidemics in the future as possible. At the same time, we rediscover nature and its good impact on body and soul, both the one in the gardens and the great nature we find for instance in Thy National Park.

Furthermore, people are increasingly letting go of control - and have found joy in - their wild gardens, with everything that can increase biodiversity. But in the middle of all the joy, the allergy strikes back. What the intellect wants, the body paradoxically pushes away. It is as if our body cannot control nature and therefore reacts against it; some say that we have developed allergies because we are afraid of them. On the other hand, one can also speculate whether nature is just smarter than we might think and uses pollen as a weapon against us - the beautiful dust entices, but in reality is modest: Let go and give us more space - we need it. The installation is installed in the old rescue house - as an entrance to a story about rescue and who saves whom. Here you meet a large, square field of yellow pollen on the floor, as a kind of blanket or as a reference to how it lies on the ground in nature. The pollen is collected in Thy National Park. On the back wall is a large photograph of a Lodgepole Pine in the dune landscape of the National Park. At the opposite end is a small display case, showing an enlarged pine pollen in a 3D print. The pollen is so small that a single pollen can only be seen through a microscope, where a world of wild forms and structures opens up. Pine pollen looks a bit like Mickey Mouse with big ears. The ears are so-called flying sacks that must keep the pollen up in the air, when carried by the wind.