

EXPEDITION HOPE STOP THE FINAL MELTDOWN.



www.expedition-hope.org

THE LAST JOURNEY OF ITS KIND.

Introduction.



n April 2, Plant-for-the-Planet and the three polar experts Bernice Notenboom, Eric Philips and Martin Hartley are setting out on a unique journey called "Expedition Hope," a 51-day march from the North Pole to Canada

to spread awareness of the dramatic effects of global warming. The name Expedition Hope was chosen by the children of Plant-for-the-Planet.

For the children, this expedition symbolizes the hope that adults and world powers alike finally recognize the urgency of this problem. The chosen route, which the polar explorers will take, will soon vanish from the face of the earth, if we don't take immediate action.

THE EXPEDITION.

About the Expedition.



pril 2 marks the beginning of Expedition Hope. On that day, Felix Finkbeiner will, as symbolic gesture, plant a tree at the North Pole and then send off the three polar explorers, Bernice Notenboom, Eric Philips und Martin Hartley, on their mission on behalf of the children of Plant-for-the-Planet.

After the symbolic planting of the tree, Felix will take the next flight, via Spitzbergen, back to Munich.

At the same time, the three polar explorers will be making steady progress on their 51-day march to Canada. Bernice, Eric and

Martin are going on this expedition to spread awareness and to signal their support for the preservation of the North Pole. The Arctic is in grave danger and it is high time for us to take action. If the Arctic ice melts away completely, numerous living creatures, including polar bears, will lose their habitat – the consequences will also be catastrophic for human beings.

THE STORY OF EXPEDITION HOPE:

the story of this extraordinary expedition began many years ago.



elix has loved polar bears ever since he received a stuffed polar bear as a Christmas present at the tender age of 5. Some years later, while researching the climate crisis for a class presentation, he learned that the Arctic and the polar bears are in grave danger. He titled his presentation "The end of the polar bear."

This presentation marked not only the beginning of Plant-forthe-Planet, but also indirectly that of Expedition Hope.

Bernice and Felix met some time ago during the filming of a documentary, which was aired in February on German televi-

sion (http://www.planet-schule.de/sf/php/02_sen01.php?reihe=1278). Bernice interviewed Felix during a train ride from Hamburg to Neuruppin, where Felix was scheduled to give a presentation. She told him about her planned expedition – Felix immediately wanted to join in. For hobby explorers, such expeditions are an extremely dangerous and strenuous undertaking.

By the end of the train ride, both had agreed on a solution: professional polar explorers would complete the expedition on behalf of Plant-for-the-Planet. The children would send off the polar explorers at the North Pole – and give them a warm welcome in Canada.



THE GOALS OF EXPEDITION HOPE:

The AC (air-conditioning) of planet earth.

f one describes the rainforest in the Amazon as the lungs of earth, one could describe the Arctic as the refrigerator or air-conditioning of earth. The plug of this cooling system must not be pulled. With Expedition Hope, the children and youths of Plant-for-the-Planet want to achieve three goals:

1. Motivate all people on earth to plant trees.

Trees are simple replicable systems, which break down CO2 – and can even bind the "C." Hence, we want to plant 1.000 billion new trees worldwide – and of course, protect the existing forests. The newly-planted trees could bind around a quarter of all manmade CO2-emissions.

On the website of Expedition Hope (www.expedition-hope.org), visitors can install the Plant-for-the-Planet tree counting tool and/or donate money directly to the children's initiative. For each donated Euro, Plant-for-the-Planet will plant one tree.



Businesses are encouraged to set themselves high goals – and to make tree pledges on a continual basis. Politicians could support the expedition through patronage. Taking the cities of Augsburg and Playa del Carmen as models, they could pledge to plant one tree per citizen. With politics on our side, we can approach businesses and tackle with them more ambitious targets.

2. Get climate scientists to join the efforts.

On the website, climate scientists from around the world are being asked to give a clear response to the question: what can mankind do to prevent global warming from exceeding the 2°C threshold?

On the website http://global-youth-climate-plan.org, youths have collected the answers of more than 700 climate scientists.

3. Start a global education platform

Expedition Hope is the starting point of another exciting project of Plant-for-the-Planet: a global e-learning platform for students and teachers interested in topics such as global warming, the climate, and of course, the Arctic.

In the last 5 years, Plant-for-the-Planet has appointed over 27.000 ambassadors for climate justice at 450 academies in almost 40 countries. By 2020, there will be one million ambassadors. We want to achieve this goal in part by creating an e-learning platform that accompanies these efforts. The initial elements of the platform will go online at the start of Expedition Hope.



OUR TEAM:

the three participants in the expedition are experienced polar explorers, who have already completed numerous expeditions.

Bernice Notenboom. The team leader.

But foremost, she is a writer, filmmaker and TV presenter. She has already delivered messages from children to Mount Everest. Bernice is originally from Holland and has been living in Canada for 25 years.

More informations: http://www.bernice-notenboom.nl/

Eric Philips. The guide.

When he is not leading expeditions — recently he led Prince Harry's journey to the South Pole — he designs equipment for outdoor sport enthusiasts, works as a public speaker, writer and photographer and lives in Australia.

More informations: http://www.ericphilips.com/

Martin Hartley. The photographer.

Martin Hartley is from Bristol, UK. He is one of the most respected adventure photographers in the world. His award-winning images have already appeared in several well-known publications, including The New York Times, National Geographic and The Guardian. Martin will provide us with images and footage from the expedition on a daily basis.

More informations: http://www.martinhartley.com/

THE COURSE OF THE EXPEDITION:

More background information on the expedition.



elix is planning to organise a Plant-for-the-Planet academy in the north of Norway in late March. Also the support of children living in colder regions is needed to successfully promote climate justice – regardless of whether these places provide the ideal conditions for planting trees. Felix will explain to the children why it is important

to plant trees worldwide: to contain global warming and to encourage the adult population to rethink its actions.

On April 2, Felix will fly together with the three polar explorers to Barneo. The camp in Barneo will be set up a few days prior to their arrival and will serve the next 20 days as a point of departure for several other expeditions. Expedition Hope will be the first one this year. A helicopter carrying Felix and the three explorers will fly 50 km from Barneo to the North Pole. Their luggage includes 3 sledges with each 120 kg of food, tents, sleeping bags, and much more. Including several kilos of "Change Chocolate" and Ritter Sport Marzipan. Marzipan has the benefit that it is rich in energy and is still eatable at double-digit minus temperatures. The polar explorers will consume more than 6.000 calories per day; nevertheless, they will have lost over 10 kilos by the end of the expedition. The luggage also includes a tree, which Felix will plant at the North Pole, as a symbolic gesture. In the evening of April 2, Felix will fly back to Barneo in the helicopter and then travel back to Norway a few days later.

At the same time, the three polar explorers will set out on their 1,000 km-long march to Canada. Using a garter belt, they will pull the heavy sledges with an initial weight of 120 kg. By the way, the participants prepared for the expedition by pulling tires.

The condition of the ice seems to be astonishingly good this year. That is great news for the expedition – according to satellite images, 40 percent more ice is expected this year than in 2012. The explorers estimate that they will travel an average of 20 km per day. During the first few days of the expedition, when the temperature is expected to be below -30°C, the ice still hard, the ground is flat and the energies are high, the explorers will complete distances above their daily average. The closer they get to Canada, the more often the explorers will have to walk over fresh ice, which is only a few centimetres thick. It is likely that they will have to swim at least 10 times a day and when doing so, they will pull the sledges as floats behind them. The varying ice- and weather conditions will noticeably reduce the average speed of the explorers.

Felix will be in contact with Bernice for 30 minutes a day via satellite telephone. During these phone conversations, Bernice will give Felix a brief overview of the daily events, which he will then pass on to the public via our newsletter, Facebook and Twitter. Martin Hartley will try to share a photo each day. A supply plane carrying 100 kg of food for each explorer is scheduled for the 25th of April 2014. The plane departs from Canada and then travels in the direction of the team, which will communicate its exact location via GPS. This technology will also be used to locate the explorers in the case of an accident or serious illness. If necessary, a second supply plane will be scheduled. If possible, Felix and friends will be on board the supply plane to not only personally pass on words of encouragement to the explorers, but also to pick up film- and high-resolution photo material. On the 22nd of May 2014, the three explorers are scheduled to arrive in Canada.





HOW CAN YOU SUPPORT THE EXPEDITION?

Promotional Opportunities.



e want as many people as possible to learn about Expedition Hope; to identify with the voyage and ideally donate to the efforts. There are various ways in which you can support the expedition. Please visit our Expedition Hope website to learn more about the conditions of participation

(click on the button labelled "Support Us") and/or contact us directly.

Famous Supporters

Hannes Jaenicke.

For many years, the famous German actor has been a passionate

environmental activist. Hannes fully supports Expedition Hope.

For more information on Hannes Jaenicke, please visit <u>www.han-nes-jaenicke.info/ArticMarchSpendeaktion</u> oder <u>www.plant-for-the-planet.org/hannes-jaenickeSpendenaktionDEMO</u>



Frequently Asked Questions.

How has the situation changed over the last decades? Has the coverage of the Arctic Sea ice already reduced itself?

Since 1978, the expansion of the Arctic Sea ice is continuously being measured using satellites. These measurements show a substantial negative trend. In figures: comparing the month of September the Arctic ice coverage decreased by an average of 11 % per decade . Despite of this decrease, the ice's surface is not continually shrinking. The values can vary significantly from year to year. For instance, the ice coverage hit a record in the summer of 1996, compared to the summers of the last three decades. The previous record low was recorded in the summer of 2007. It is noteworthy that the ice's expansion has barely recovered itself since then – also throughout 2008 and 2009, it remained at a low level. From a long-term standpoint, it is clear that the ice coverage of the Arctic is decreasing.

In the future, the climate is likely to become even warmer. How will the Arctic Sea ice be affected by this global warming? Will the North Pole eventually have no ice in the summer?

The warming will result in the continual decline of both the expansion and thickness of the ice. This trend is reinforced by feedback processes: The further the ice shrinks, the more visible the open ocean becomes. In contrast to ice, the ocean can absorb sunrays very well; hence it can heat itself up additionally. This heating process in turn leads to a further reduction in the ice coverage. Nevertheless, it is still hard to say when we will have an ice-free North Pole in the summer months. Our climate models still provide no clear answer on this. Some suggest that the North Pole will be ice-free around the year 2080, or even later. Other models suggest that it could be as soon as 2040. But there are also voices that claim it could happen even earlier –some believe that it could occur within the next few years. This sounds very unlikely.

How could the decrease in the Arctic ice coverage affect the animals and plants living there?

There are a variety of possible consequences. In the summer time, more light rays will enter the ocean, thus there will be more energy available to plankton; consequently, the plankton will grow in size. This has a substantial impact on the other links in the food chain, and thus for higher organisms such as fish, which feed on plankton, directly or indirectly. On the other hand, we should also consider those species, which live beneath the ice and depend on it the entire year, including small crustaceans such as krill. They have a key position in the food chain because they not only eat algae, but are also eaten by fish, birds or seals. Consequently, while the plankton increases, krill stocks decrease – that shifts the entire ecosystem. In addition, the large influx of the relatively warm, saltrich Atlantic water masses could bring a distinct composition of species in the Arctic Ocean. These could dominate at least some sub-regions in the future.

Would the melting of the Arctic ice have an impact on sea levels?

Not directly. After all, sea ice floats and displaces an equal amount of water relative to its own weight. If this ice melts, the sea level will not change. But there may be indirect effects- not on the global sea level, but on the regional distribution. Where the ice melts, sea currents can change and thus the regional distribution of the sea level will also change. Exactly how the ocean currents will change when the ice cover decreases is difficult to predict. If it should have an impact on the large-scale currents in the Atlantic, and thus on the Gulf Stream, it could lead to a significant rise in the sea levels along the coasts of North America and Europe.

Could the melting of Arctic sea ice also have implications for our weather?

Probably. As long as the ocean is covered with ice, it is properly insulated from the atmosphere heat. Therefore, it does not emit heat into the air during the winter. But as soon as the ice cover dwindles, heat from the water more regularly enters the atmosphere. This seems to influence the air pressure pattern in the atmosphere. Over the years, we have noticed that the air pressure patterns are gradually shifting. In the past, the so-called North Atlantic Oscillation was the predominant pattern -a high pressure area over the Azores and a low pressure area over Iceland. The low pressure area in Iceland brought warm, moist air to Central Europe during the winter. In recent years, however, this low pressure area shifted further east towards Siberia. This exposes large parts of Europe to northerly winds with cold and dry air. That means that in the future, the winter could be drier.

What is the difference between the Arctic and the Antarctic?

The Arctic is not a continent, but a continent -surrounded ocean, the Arctic Ocean. In this up to 5500m deep ocean, floats a several meter thick ice sheet, which was formed during the Pleistocene (1 million years ago). The ice of the Arctic Ocean is perennial and covers almost the entire Arctic Ocean during the winter. The seasonal variations in the ice coverage are smaller and it is warmer than Antarctica. The Arctic Circle runs mainly over land and includes forests and tundra, as well as settlements and industry.

A visitor stands on pack ice at the North Pole. Under a mostly cloudy sky, one must endure temperatures close to the freezing and up to -30 °C in the winter.

(Source :)

http://www.awi.de/de/aktuelles und presse/hintergrund/klimawandel/schmilzt das eis am nordpol /

Albedo:

The albedo is a measure of the brightness of an object. The brighter the body is, the greater the albedo. Consequently, the more solar radiation is reflected, the brighter the body. The albedo of our planet has strongly influenced the melting of Arctic ice. If ice with a high albedo melts and is replaced by sea water with a significantly lower albedo, the global warming in these areas will be much higher than in others. This process is called ice-albedo feedback.

(Source :)

http://wiki.bildungsserver.de/klimawandel/index.php/Albedo % 28einfach 29% http://www.awi.de/de/aktuelles und presse/hintergrund/arktisforschung/