



- 1** **3800 million years ago**  
Origin of life
- 2** **3000 million years ago**  
First Photosynthesis
- 3** **2400 million years ago**  
Atmospheric Oxygen
- 4** **1800 million years ago**  
Modern Cells
- 5** **1000 million years ago**  
Predecessors of Animals
- 6** **800 million years ago**  
Snowball Earth

- 7** **560 million years ago**  
Cambrian explosion
- 8** **420 million years ago**  
Conquering the land
- 9** **250 million years ago**  
Age of the Dinosaurs
- 10** **65 million years ago**  
Age of the mammals
- 11** **5 million years ago**  
Evolution of Humans



## PLÖN EVOLUTION TRAIL





The **Plön Evolution Trail** consists of eleven stations presenting the evolution of life on Earth. The distance between stations corresponds to the time periods between each, but with two adjustments to the scales indicated by the magnifying glasses on the timeline (see below).

As a special feature compared to the usual presentations, the trail contains six stations on the prehistory of the Earth, which were only poorly known until recently. We now know that there were dramatic phases. For example, there were two periods in which the Earth was completely frozen for millions of years. At least one of these phases was triggered by a climate catastrophe **3**. In the second cold phase **6**, all the evolutionary lineages of animals diversified under the ice.

With thawing of the planet, the way was clear for the development of body forms that we find as fossils.

This was particularly rapid during the Cambrian explosion **7**. At this time the first predators appeared that used other animals as a food source. But these had to defend themselves and an „arms race“ between defenders and attackers ensued (see cover picture). Many of these animal forms later became extinct again, especially in a catastrophic phase 250 million years ago in which more than 90 percent of all species were lost **9**. This made room for the dinosaurs, which then dominated the earth for almost 200 million years. Their end finally came with a meteorite impact 65 million years ago. This marked the beginning of the age of mammals, which previously lived only in the shadow of the dinosaurs **10**.

Modern humans appear very late in Earth’s history. Although ancestral forms existed several million years ago, today’s humanity can be traced back to ancestors who evolved only 0.25 million years ago in East Africa. In the case of humans, that’s just 10,000 generations, which is why all humans are actually one big family **11**.

The Plön Evolution Trail takes you from the Market Pier to the Max Planck Institute for Evolutionary Biology. Here, scientists from all over the world work - as one big family, so to speak - on current questions in evolutionary biology.

To reach the last stations of the trail, you have to turn at the underbridge under the B76. If you want to continue walking after visiting **11**, you can take the circular route around Lake Schöhsee, which takes about an hour and offers many beautiful views.

We hope you enjoy your visit to the Evolution Trail. Even if you are well acquainted with the evolutionary history of Earth, you will probably discover some new things. And the owl always adds his comments, which should also appeal to children.

Why not also take a look at **8** and use it as an opportunity to reflect on how narrowly we have escaped a global catastrophe in the late 20th century caused by the impending loss of the ozone layer - thanks to the engagement of scientists and politicians.

If you want to explore topics from the stations in more depth, you can use your smartphone and the QR codes on the display boards and in the flyer to access more information.

