WHAT DO YOU RECKON? HOW MANY CREATURES CAN BE FOUND IN A FISTFUL OF FOREST SOIL?

A: approximately 5000 B: approximately 10000 C: approximately 1 million D: more than the number of people living on the earth

Please use the grey stamp!

The **ENGLISH OAK** can live to be over 1000 years old.





A fistful of forest soil harbours

than there are people on the earth!



These creatures include animals, fungi, bacteria

and also algae. Sometimes you can recognise the creatures with the naked eye. These include woodlice, spiders, ants and earthworms, for example. However, sometimes it is just tiny unicellular organisms and mites which you can only detect under a microscope. Together they ensure that the forest soil is healthy.







MICROCLIMATE FOREST

If you go into a forest on a warm, sunny day, you notice the change in ambient air after just a few steps. Forests have an appreciable effect on the microclimate. Firstly, the shade provided by the leaf canopy with its crown-like cover plays an important role. Secondly, the wind only manages to infiltrate the treetops of the forest, which results in lower levels of evaporation. As a result, forests feel cooler and more moist.

THE FOREST AS AN ADVENTURE AREA

Anyone who has ever gone for a walk in a forest would agree that such a visit is something special. Is it the rustling of the leaves in the wind, that foresty smell totally unique to woodlands or the rays of sunshine that penetrate the leaf canopy individually? Plants exchange messages with each other. Terpenes are the materials that they send through the air for this purpose. When we visit a forest, we breathe in these materials and benefit from their effect.











THE FOREST AS A THERAPY ROOM

It was proven scientifically a long time ago that visiting a forest has a positive effect on our entire immune system and the psyche. A stay of just a few hours is enough to increase the number of immune cells in the body, reduce the blood glucose level and blood pressure and slow down the secretion of stress hormones. And all these positive effects continue to linger for days afterwards. This positive effect on us humans is called the biophilia effect.



ANNUAL RINGS

If you cut right through the trunk of a tree, you can see its annual rings. In winter the tree rests and in spring, it consumes the nutrients it has stored. The growth phase does not start until early summer when thin-walled, loose tissue is generated around the edge of the trunk. A bright ring is created. Thicker, firmer tissue is generated in late summer. A dark ring is created. If the annual rings ever turn out to be narrower, the tree was affected by dryness or disease in this particular year. Just take a look at the slice of oak tree beside you to get an idea of everything this tree experienced in the years it was alive!



The adventure trail is a pilot investment of the VISIO project. It is realised within the framework of the INTERREG V-A, SK-AT programme and co-financed by ERDF.



THE GREEN LUNG

A healthy mixed deciduous forest with a varied species and age structure stores on average approximately 12 tonnes of carbon dioxide – in short CO₂ – per hectare and year. Put very simply, a tree splits the CO_2 from the air into glucose and oxygen. It stores the glucose in the form of carbon in its wood and emits the oxygen together with steam into the air. The tree therefore ensures simultaneously that the air is cleaned and refreshed. Trees need carbon in order to grow. Consequently, young trees need large amounts of CO $_2$ particularly in their growth phase. However, old, tall trees with many leaves and thick trunks usually utilise more of it. The forests of Europe absorb approximately 20% of CO $_2$ emissions annually. Although they cannot halt climate change on their own, they are an important factor in the fight against the greenhouse effect.

We oaks are long-lasting, robust trees. Not only can our wood withstand a great deal, it can also be easily machined by you humans. In the past, oak was readily used to build ships and wine casks. Today our wood is regarded as being particularly classy and is used for parquet floors and designer furniture.

Although our fruits taste bitter, they are an important source of food for many animals and sometimes also people. Pigs in particular love the acorns, not just wild boar. In the past domestic pigs were also driven into the forest to eat their fill of the numerous acorns. Afterwards their ham had a particularly outstanding flavour.

> Concept, implementation & layout: www.pronatour.at Images: 1–3, 5 – in the public domain; 4 – © Maridav/shutterstock.com;