

Základní Škola Staňkova, 128

THE GLOBE PROGRAM

Team: Bukouni

OUR SCHOOL

State: Czech Republic

City: Pardubice

School: Základní škola Staňkova

Team: Bukouni



MEMBERS

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Honza Tihelka

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ABOUT OUR PROJECT



- The observation started on september 10 and ended on October 31.
- During this time, the color of the leaves did not change, and the color code was 5GY 3/2.
- Some leaves started to turn brown, but our branch stayed the same.
- That's why we find the bee
- ch tree's coloring interesting. We measured the leaves 2 times a week , every wednesday and friday.
- We had colour-sheeds and one specific branchlet with four marked leaves.

ABOUT THE TREE

HIGH : 5.55 m

GENUS AND SPECIES: Buk lesní

LOCATION: 5 meters from school
and it is northeast from school



WHY DO LEAVES CHANGE COLOURS?

In autumn, the days get shorter and the weather gets cooler. The tree no longer needs as many leaves for photosynthesis, so it begins to break down chlorophyll – the green pigment in the leaves.

When the chlorophyll disappears, other pigments that were hidden in the leaves become visible:

Carotenoids – give yellow and orange colors,

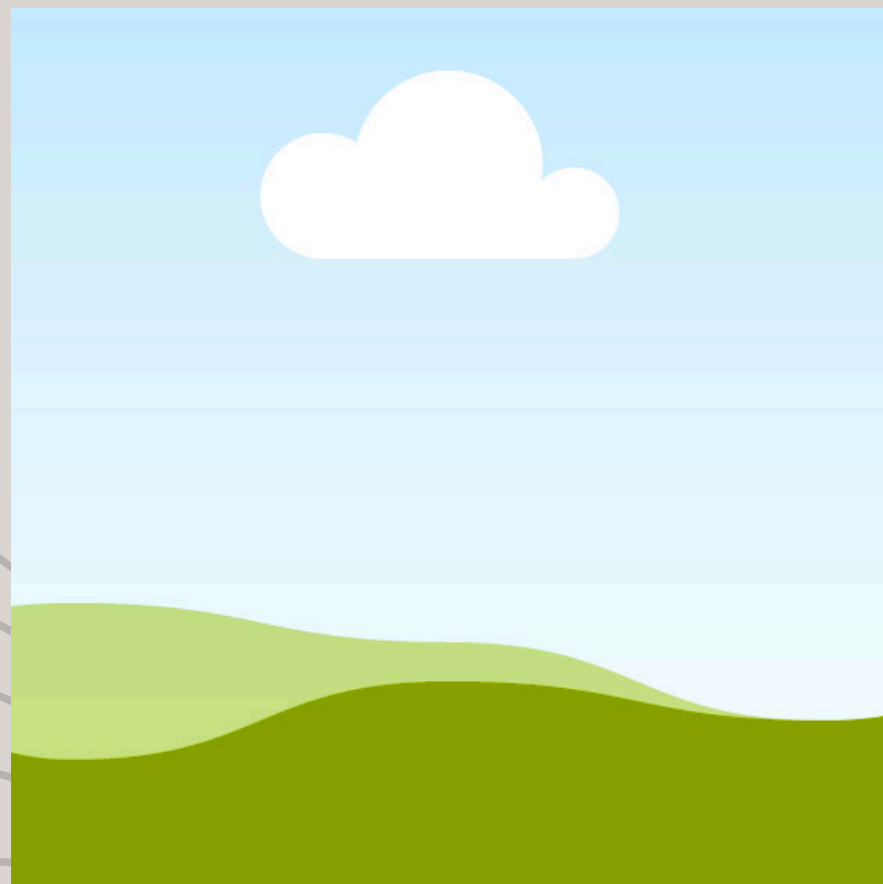
Anthocyanins – form later and color the leaves red or purple. pigments.

In short: leaves change color because the tree breaks down green chlorophyll, revealing the other pigments. This process helps the tree save nutrients (such as nitrogen and magnesium), which are moved into the trunk and roots for the winter.

WHY DO LEAVES FALL OFF TREES?

- Leaves fall off trees mainly in autumn. When days become shorter and colder, trees get less sunlight. Sunlight is important because trees use it to make food.
- In winter, there is not enough sunlight and water, so keeping leaves would be difficult for the tree. Leaves also lose a lot of water and can be damaged by cold and snow.
- To save energy and water, trees stop sending nutrients to their leaves. The leaves then change color, dry out, and finally fall off. This helps the tree survive the winter and grow new leaves in spring.

WHAT WE FOUND OUT



- From the tables we found out that for a long time they had the color 5GY 3/2 and suddenly changed to the color 5YR 7/12 and then faded.