All you need to know about the Autumn campaign

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September ➔ December

Registration
- Registration form - website
- E-mail to lenka.kleger@terezanet.cz

Newsletter
Certificate
Campaign Activities

• 3 activities
• Available on the website

Activity 1
• Find and describe your tree
• Measure tree height
Campaign Activities

Activity 2

• Observe color change and falling of leaves
• Twice per week until leaves fall down
Campaign Activities

Activity 3

• Enter data into the GLOBE database
• Create graphs of Green-down
• Webinar on October 19th
GrowApp

• Mobile application
• Time lapse videos
• Use # to describe tree species and your school
Discussion Forum

Sharing of pictures and results

1. Sign in to GLOBE account
2. Become member of Campaign community
3. Start posting
Collaboration group

- Registration by online form or by e-mail
- 70 schools this autumn
- International groups of 2-4 schools
  - Exchange of data and pictures by e-mail
  - Communication via phone / ZOOM / Skype...
  - Student research projects
  - Practicing language skills
Webinars

Webinars became important part of the campaign. For autumn 2020 we have planned for you a series of webinars, focused on autumn tree change and use of GLOBE data tools and apps. The webinars will also provide opportunity for sharing experience and meeting scientists. The webinars are prepared in cooperation with scientists from Trees Around the GLOBE campaign team.

Upcoming webinars for Autumn 2020

- **September 21, 2020 at 3 pm CET (Prague):** All you need to know about the Autumn campaign. Sign up to receive link to the webinar. In the webinar you will:
  - Learn about the campaign schedule, activities, and resources.
  - Get inspired by the school collaboration project.
  - Meet Trees Around the GLOBE campaign lead by Brian Campbell, and learn about the campaign and related NASA missions.
  - Discover online tools looking at phenology from space introduced by Peder Nelson, a scientist from Oregon State University.
- **October 5, 2020:** What happens with trees in autumn? Why do scientists need phenology data?
- **October 19, 2020:** How to work with autumn data (visualisation, GLOBE observer, apps).
- **Mid-November:** Autumn observations and cooperation. Sharing and learning from other schools and countries.

Trees around the GLOBE campaign upcoming webinars

- **Tuesday, September 15, 2020 @ 6:00pm UTC:** Kicking Off Year 3 With Tree Height Research Using Satellites and Ground-Based Instruments: The importance of tree and vegetation research to help us understand our changing planet.
Download Materials

Activities | Field Guides | E-Training | Protocols | GLOBE Data Tutorials | Lesson Plans

- 2020 Spring Campaign Flyer - basic information about the campaign
- Presentation
- GLOBE 365 Poster - a place to stick photos of your tree as we track its growth. If you need a hard copy of the poster, contact your GLOBE country coordinator.
- Why do the leaves change color? - learn why and how the autumn colors come
- Winter twigs - a key to recognizing buds

Activities for students

Spring
Activity 1: My Tree = carbon activity: Tree Growth Game
Activity 2: Look at the Buds = Data Sheet = Carbon Around Me
Activity 3: First Leaves = carbon activity: Carbon in my tree
Activity 4: My Green Up Data + Data Upload Guide = carbon activity. This is the photosynthesis monitoring
Activity 5: Green Color Scale

Autumn
Activity 1: My Tree = How Tall Is My Tree?
Activity 2: Color Change of Leaves
Activity 3: My Green Down Data + Data Upload Guide

Green Up/Down e-training
E-training and closer information about Green-up and Green-down: protocol e-training

GLOBE protocols

- Green up protocol
- General field guide Trees
- Data Sheet Trees and Shrubs

- Green down protocol
- General field guide Trees
- Data Sheet Trees and Shrubs

How to work with GLOBE data?

GLOBE Data Entry - GLOBE data can be submitted on a desktop pc or using the GLOBE data entry app.
Visualize GLOBE data - Instruction for visualizing GLOBE phenology data...
Looking at GrowApp data - Analyzing green index of GrowApp images

Lesson plans

- A first look at phenology: Students explore patterns, similarities, and differences among plants at the same location.
- A sneak preview of budburst: Students observe the relationship between budburst and temperature.
- Green down (age 11-14): Students learn to ask questions while using the research cycle.
- What’s hidden in tree buds (age 11-14): Students get familiar with the structure of the buds of deciduous trees, they
Get inspired - Student Research projects

NEW How do birches in Otokovice and Bierun fall asleep?
An excellent example of cooperation and use of inquiry-based science education principles by Primary school Mähesova Otokovice, Czech Republic and Primary School no.1 in Bierun.

Zhoravska Secondary School, OŠ Durmanec, Croatia, and ZS Predmosti became partner schools in the 2020 Spring Campaign.
The results of their exemplary collaboration are summarized in this presentation.

Research on the role of trees in a carbon cycle by students from Kinasivska secondary school of III degrees, Ukraine
See interesting results of the research shown in this presentation.

Time of budburst and dynamics of leaf growth in Tilia cordata Mill. at Varaždin and Belišće
An excellent example of how research can be done with Green Up Action in GLOBE Project.

Interesting facts about fig trees presented by GLOBE students from Malta.
Students from Malta explored the historical and cultural aspect of fig trees and presented their findings.
My tree grows under Covid-19 restrictions

For many of us, it is very difficult now to observe our tree. Despite this, the campaign continues and brings new collaboration and study opportunities. On this page, you will find activities that your students can do from their garden and home as well as other tips from teachers who do distant teaching.

Please let us know, what you do. Share graphs, photos or paintings from your students at the discussion forum and inspire the campaign community.

Ideas, How to Stay Involved

- Can you go outside? Do you have a tree in your garden? Observe its buds and the first leaves. Measure how fast a leaf grows.
- Are outdoor activities restricted? Use GrowApp to take pictures of a tree that you can see from a window and post them to the forum.
- Use data from the GLOBE database - compare results from different regions or countries. Create and share graphs.
- Exchange results via Skype, Zoom, WhatsApp or any other online communication.
- Call your partner teacher(s) and get to know each other. Ask your students to prepare a presentation about themselves and your school (in English).
- Go through the protocol e-training (Tree and Shrub Green-Up).
Thank you!

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www.globe.gov/web/european-phenology-campaign