



# All you need to know about the Autumn campaign



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**Europe and Eurasia**  
**Region Coordination Office**

**Sep 21**  
**2020**



September → December

## Registration

- Registration [form](#) - website
- E-mail to [lenka.kleger@terezanet.cz](mailto:lenka.kleger@terezanet.cz)

## Newsletter

## Certificate



Autumn trees are miraculous. They shine with fireworks of colors.  
Let's find out when, how, and why the tree prepares for winter sleep.  
Your measurements into the GLOBE database and compare your data with schools  
across Europe.

**WEBINAR:** All you need to know about the Autumn campaign. **September 21, 2020 at 3 pm CET (Prague).** Sign up to receive link to the webinar or [read more](#).

for the campaign will receive 3 learning activities for students and regular newsletters with invitations  
they will also have the opportunity to **earn a GLOBE certificate** and be part of the lively campaign  
tial registration ended on September 10th, but **it is never too late to join**. If you wish to do so, please  
fill in a short **REGISTRATION FORM**.



# Campaign Activities

- 3 activities
- Available on the website

## Activity 1

- Find and describe your tree
- Measure tree height



### European Phenology Campaign

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[Our Measurements](#)

[My Tree grows under Covid-19](#)

[GrowApp](#)

[Contacts](#)

## Download Materials

[activities](#) | [field guides](#) | [e-training](#) | [protocols](#) | [GLOBE data](#)

- [2020 Spring Campaign Flyer](#) - basic information about the campaign
- [Presentation](#)
- [GLOBE 365 Poster](#) - there is a place to stick photos of your tree as well! If you want a hard copy of the poster, contact your GLOBE country coordinator.
- [Why do the leaves change color?](#) - learn why and how the autumn change of tree
- [Winter twigs](#) - a key to recognising 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: The Case of Mi

**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



# Campaign Activities

## Activity 2

- Observe color change and falling of leaves
- Twice per week until leaves fall down

### Example of Completed Green-Down Data Sheet

#### Tree, Shrub, and Grass Green-Down

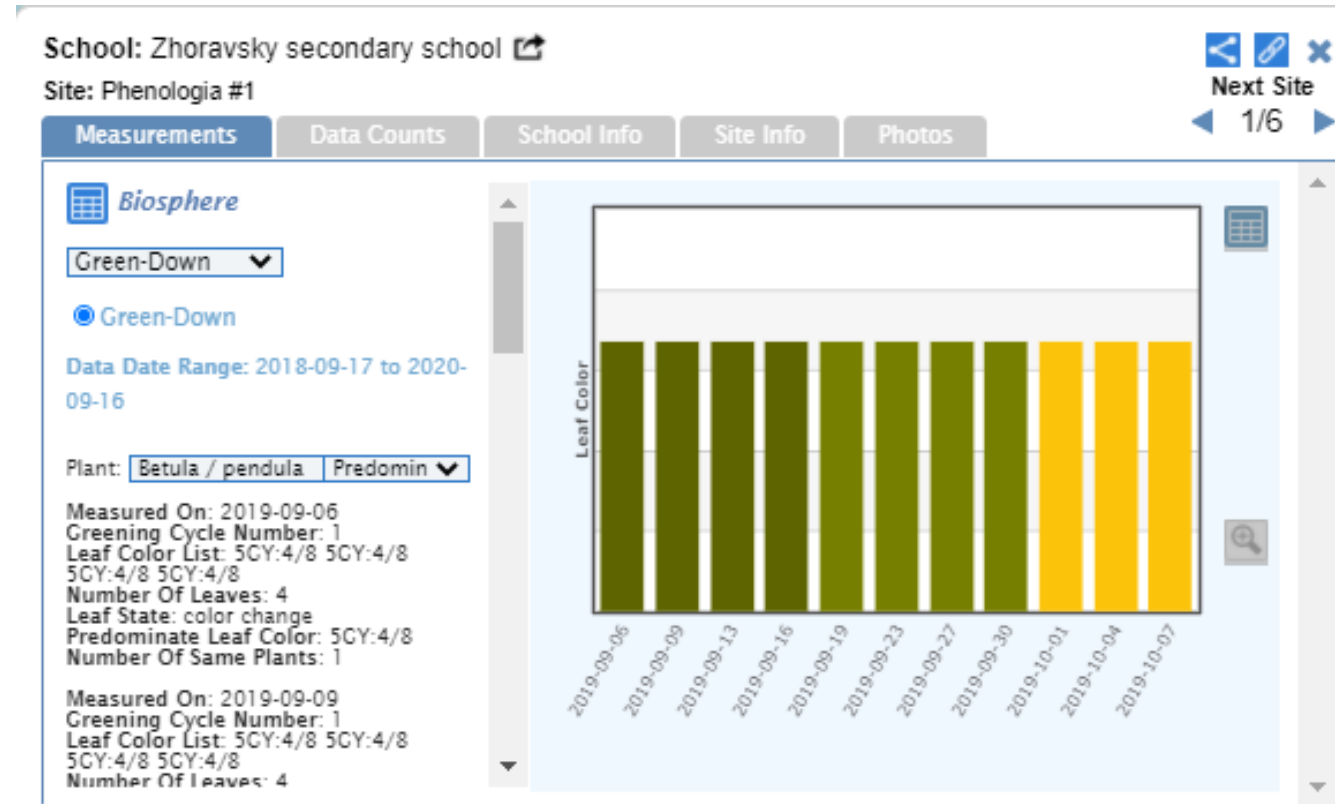
Date YYYY-MM-DD (year-month-day)	Growing season cycle (1, 2 or 3)	Leaf 1 (Color, fallen, snow covered)	Leaf 2 (Color, fallen, snow covered)	Leaf 3 (Color, fallen, snow covered)	Leaf 4 (Color, fallen, snow covered)	Data submitted to GLOBE
2013-09-30	1	5 G 7/4	5 G 7/4	5 G 7/4	5 G 7/4	<input type="checkbox"/>
2013-10-03	1	5 G 7/4	5 G 7/4	5 G 7/4	2.5 Y 8/6	<input type="checkbox"/>
2013-10-07	1	5 G 7/4	2.5 Y 8/6	5 G 7/4	2.5 Y 8/6	<input type="checkbox"/>
2013-10-11	1	5 G 7/4	2.5 Y 8/6	2.5 Y 8/6	2.5 Y 8/6	<input type="checkbox"/>
2013-10-14	1	5 G 7/4	2.5 Y 8/6	2.5 Y 8/6	2.5 Y 8/6	<input type="checkbox"/>
2013-10-16	1	2.5 Y 8/6	2.5 Y 8/6	2.5 Y 8/6	2.5 Y 8/6	<input type="checkbox"/>



# 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

Sign in to GLOBE account



Become member of Campaign community



Start posting



The screenshot shows the 'Community Members' page for the 'European Phenology Campaign'. On the left, a sidebar menu lists various options: 'Autumn 2020', 'Spring 2020', 'Webinars', 'Download Materials', 'Get Inspired', 'Community' (circled in yellow), 'News and discussion' (circled in yellow), 'Our Measurements', 'My Tree grows under Covid-19', 'GrowApp', and 'Contacts'. A hand cursor is pointing at 'My Tree grows under Covid-19'. The main area features a world map with yellow location pins concentrated in Europe. To the right of the map, a list of community members is displayed, including 'Mrs. Adi Levy', 'Aida Petrovska', 'Aleksandra Majstorović', 'Aliona Dendyk', and 'Aljona Gerashchenko'. At the bottom of the page, a 'Leave Community' button is circled in yellow.

 Leave Community

If you wish to join this campaign, log in to your GLOBE account and click the 'join community' button above the community will allow you to post to the discussion forum. You will also receive posts from other schools via email.



# 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

### European Phenology Campaign

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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

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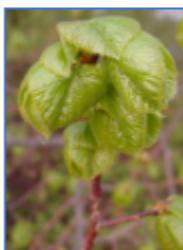
[Activity 2: Color Change of Leaves](#)

[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

- [Green up protocol](#)
- [General field guide Trees](#)
- [Data Sheet Trees and Shrubs](#)



#### Green down

- [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



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## Get inspired - Student Research projects



### **NEW** How do birches in Otrokovec and Bierun fall asleep?

An excellent example of cooperation and use of inquiry-based science education principles by Primary school Mánesova Otrokovice, Czech Republic and Primary School no.1 in Bieruń.



**Zhoravska Secondary School, OŠ Đurmanec, Croatia, and ZS Predmosti became partner schools in the 2020 Spring Campaign.**

The results of their exemplary collaboration are summarized in this presentation.



**A team from OS Ivana Filipovica Osijek, Croatia used an innovative way, how to facilitate cooperation and share information about their research.**

Get inspired by the beautiful presentation of results using Wakelet online collection.



**Research on the role of trees in a carbon cycle by students from Kinasivska secondary school of I III degrees, Ukraine**

See interesting results of the research that was carried out using



**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 data in GLOBE. Read the



**Interesting facts about fig trees presented by GLOBE students from Malta.**

Students from Malta explored the historical and cultural aspect of fig trees and created many beautiful

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## My tree grows under Covid-19 restrictions

[how to stay involved](#) | [data entry and visualisation](#) | [buddburst animations](#) | [inspiration from teachers](#)

For many of us, it is very difficult now to observe our tree. Despite that, **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](http://www.globe.gov/web/european-phenology-campaign)

