



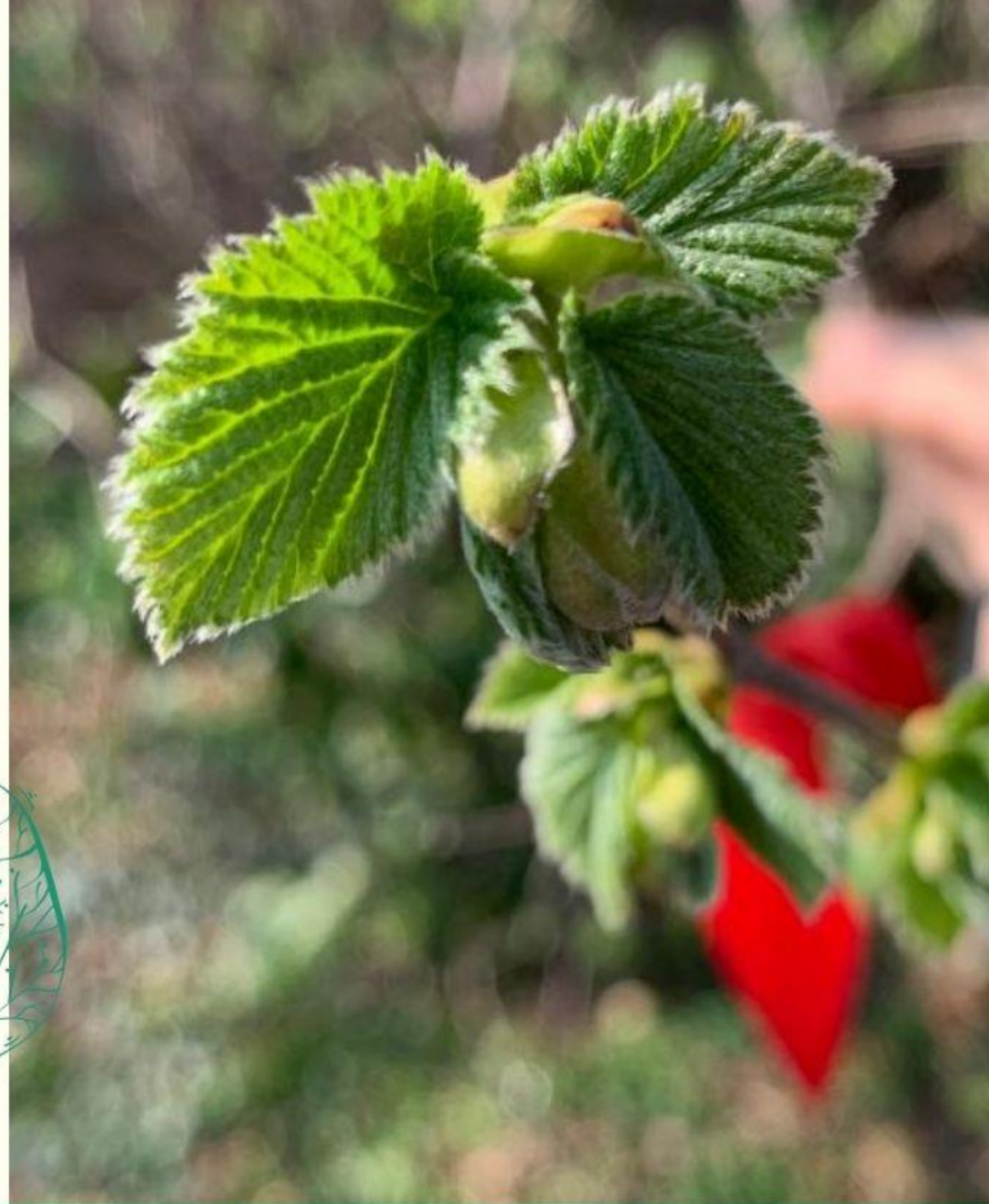
**THE GLOBE PROGRAM**

EUROPEAN PHENOLOGY CAMPAIGN WEBINAR

# Welcome to the Spring Campaign

Learn all you need to know about the 2024 Spring Tree Campaign plans. Discover green-up and carbon activities and tree height measurements.

28 February 2024



Picture by Secondary School Leonardo da Vinci, Italy



# 2024 Spring Tree/Phenology Campaign

February ➡ June

## Campaign aims

- Exploring trees and their change over spring
- Learning about the place, where they grow
- Meaningful time outdoors
- Sharing and cooperation



# 2024 Spring Phenology Campaign

## Activities

- **Green-up (4)**
- Carbon cycle (4)
- Tree height (1)
- Trees and urban heat island (1)

All activities are  
voluntary.  
Let us know, how it  
goes!



**YEAR OF CLIMATE AND CARBON**  
A **GLOBE** Action and Awareness Campaign  
August 2023 • August 2024

## Communication

- Newsletter, Discussion forum, Webinars

## Award for active participation

- Certificate
- Badges for cooperation  
and data entry





# Green-up activities

## ACTIVITY 1 MY TREE



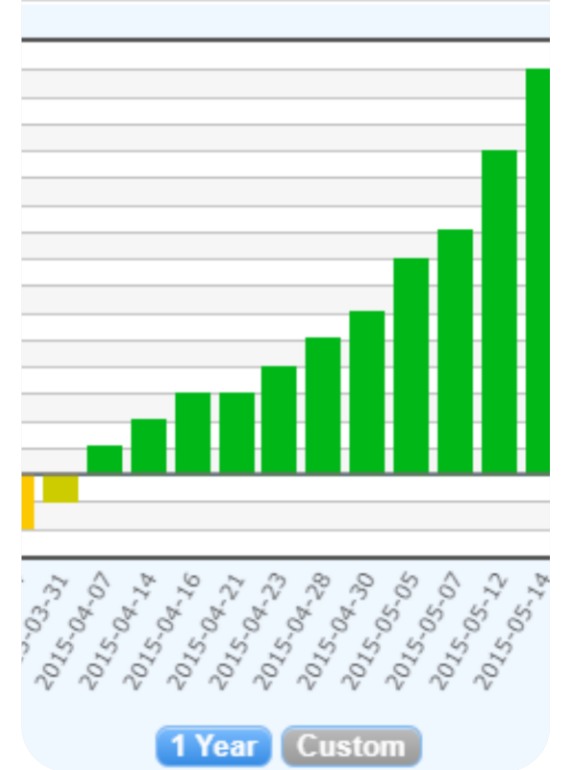
## ACTIVITY 2 LOOK AT THE BUDS



## ACTIVITY 3 FIRST LEAVES



## ACTIVITY 4 MY GREEN UP DATA



# Activity 1 – My Tree

- Find a suitable tree
  - Close
  - Low south-facing branch
  - Not shaded, watered, fertilized
- Describe the tree and the site where it grows
- Take pictures with GrowApp
- Share pictures of your tree without leaves at the discussion forum



Sour cherry



Small-leaved lime



Hazel



Penduculate oak



Silver birch



Beech



Fig

# Activity 2 – Look at the Buds

- Select and sign a branch and 4 buds
- Observe them 2 times a week
- Record the observations into the Tree and Shrub Green-Up Data Sheet
- If you have an Atmosphere site nearby, keep recording temperature and precipitation data
- Share date of budburst

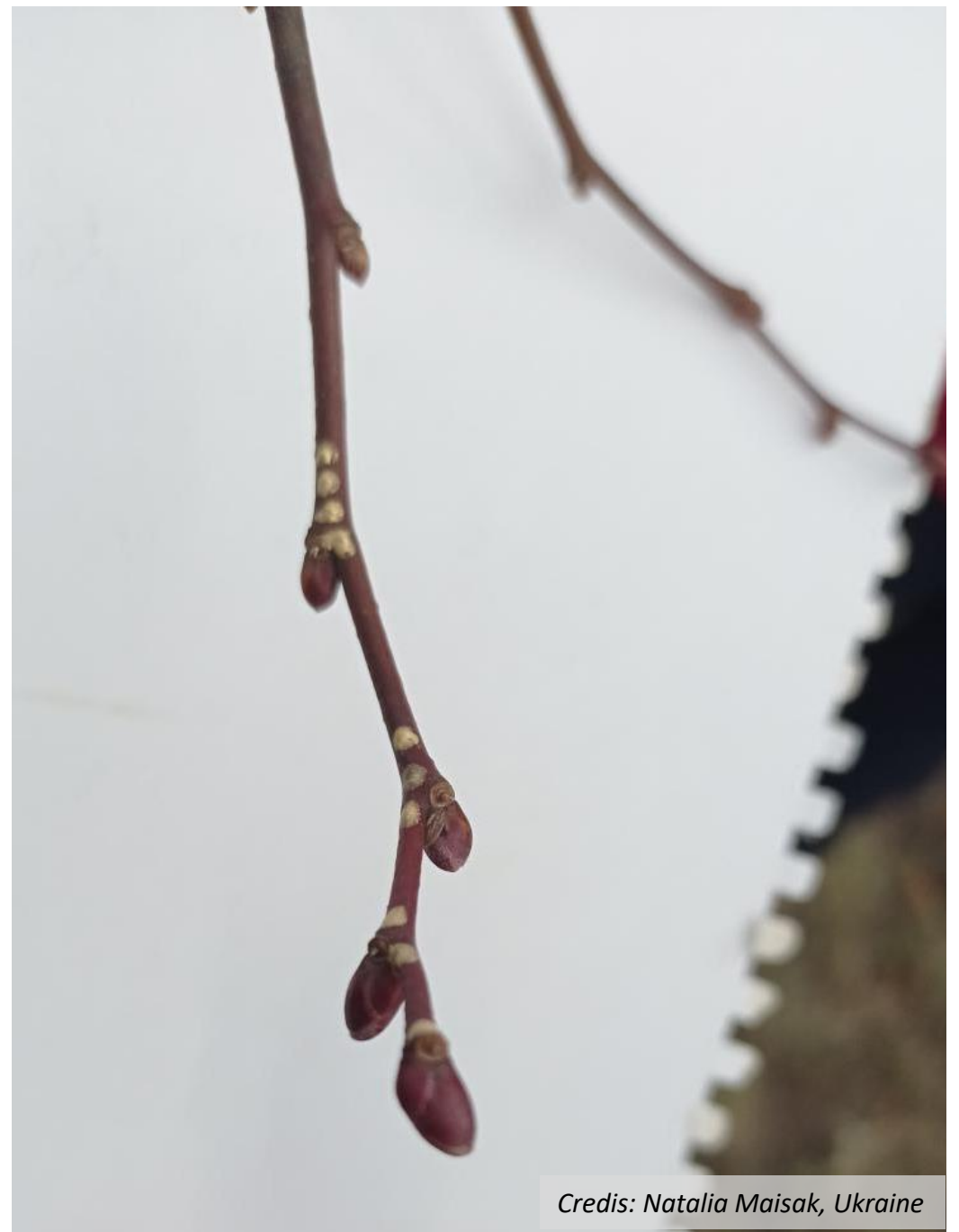


Tree and Shrub Green-Up					
Date (day & month)	Leaf 1 (dormant, swelling, budburst, leaf length (mm))	Leaf 2 (dormant, swelling, budburst, leaf length (mm))	Leaf 3 (dormant, swelling, budburst, leaf length (mm))	Leaf 4 (dormant, swelling, budburst, leaf length (mm))	Data entry ✓





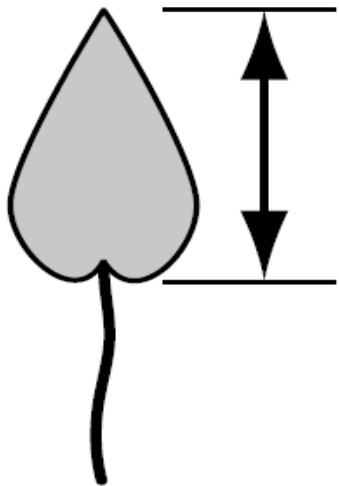
*Credis: Poltava School, Ukraine*



*Credis: Natalia Maisak, Ukraine*

# Activity 3 – First Leaves

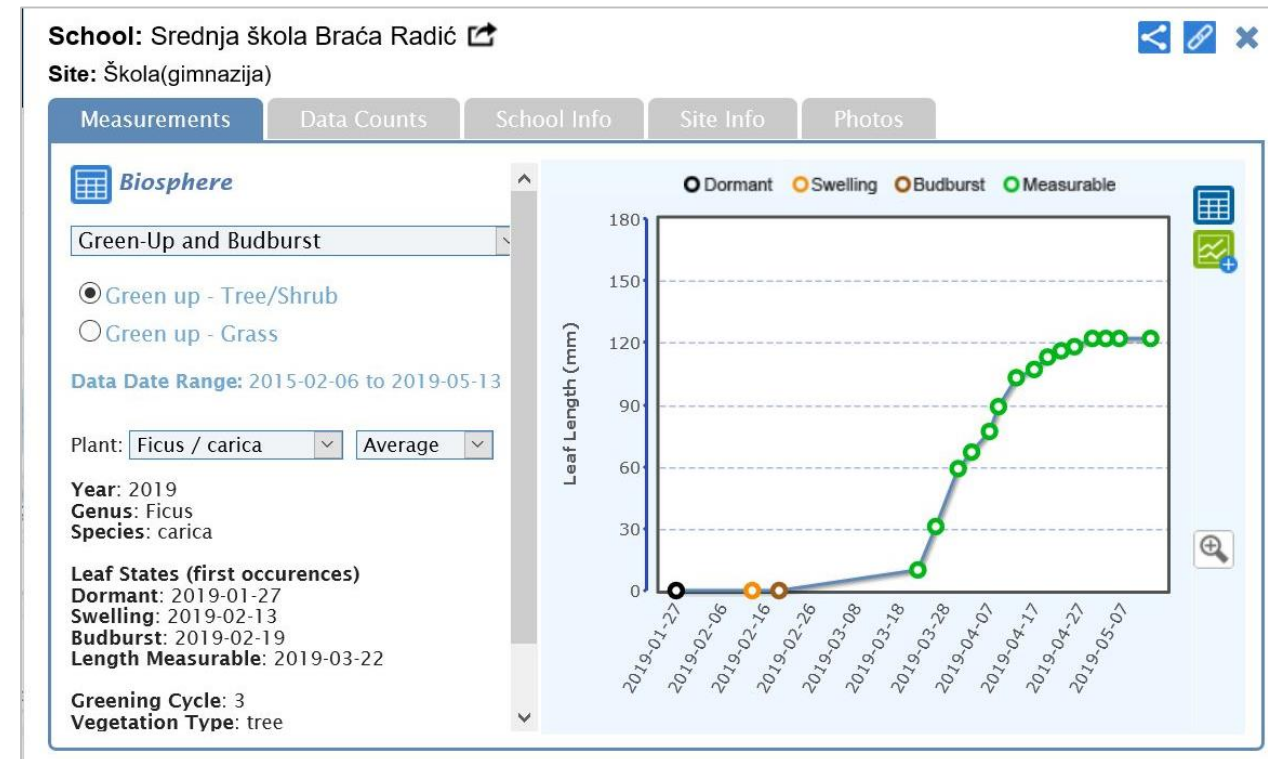
- Budburst (= you can see the tip of green leaf) - record to your data sheet
- **Measure the length of a leaf that grows from the bud**
- Measure the leaf without the stem
- Continue twice a week until your leaves stops growing





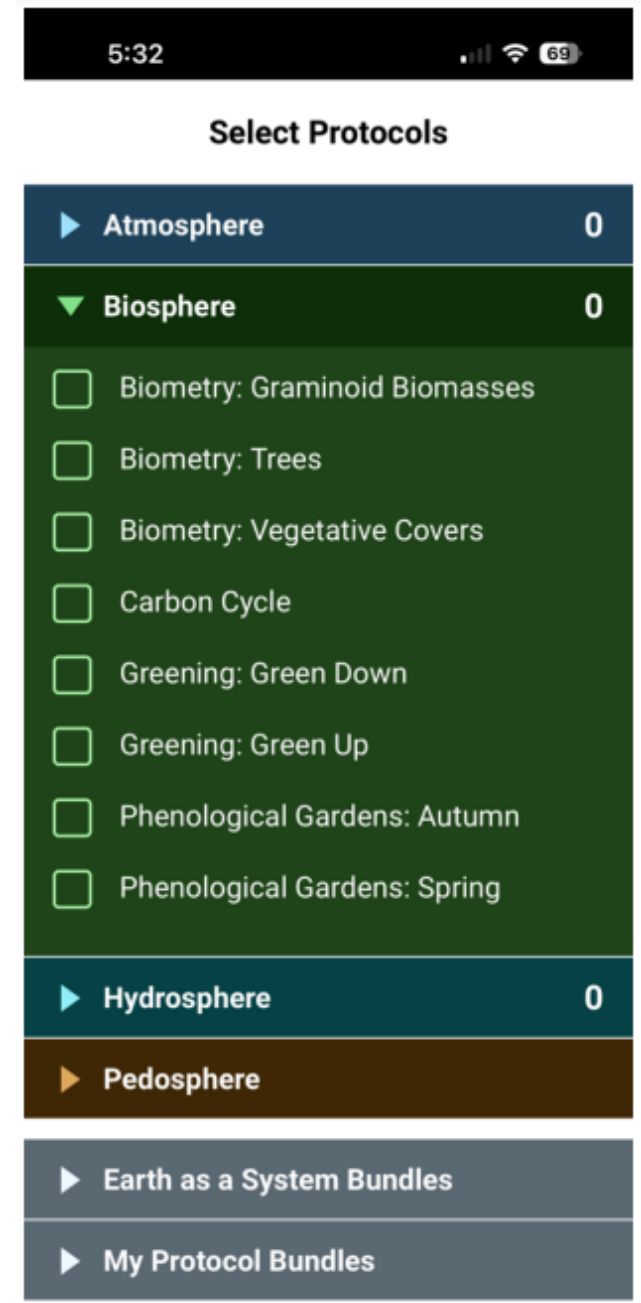
# Activity 4 – My Green Up Data

- Upload your green up data to globe.gov website
  - Login to your **GLOBE account**
  - Data collected at Activities 1, 2 and 3.
- Try GLOBE Visualization tool
  - - See the data on world map
  - - Draw and share a graph with your data
- Compare your data
  - with another school
  - to your data from previous years



# Entering Green Up Data

- Now also on GLOBE Observer Data entry App  
[observer.globe.gov](https://observer.globe.gov)
- Data guide included in the Activity 4

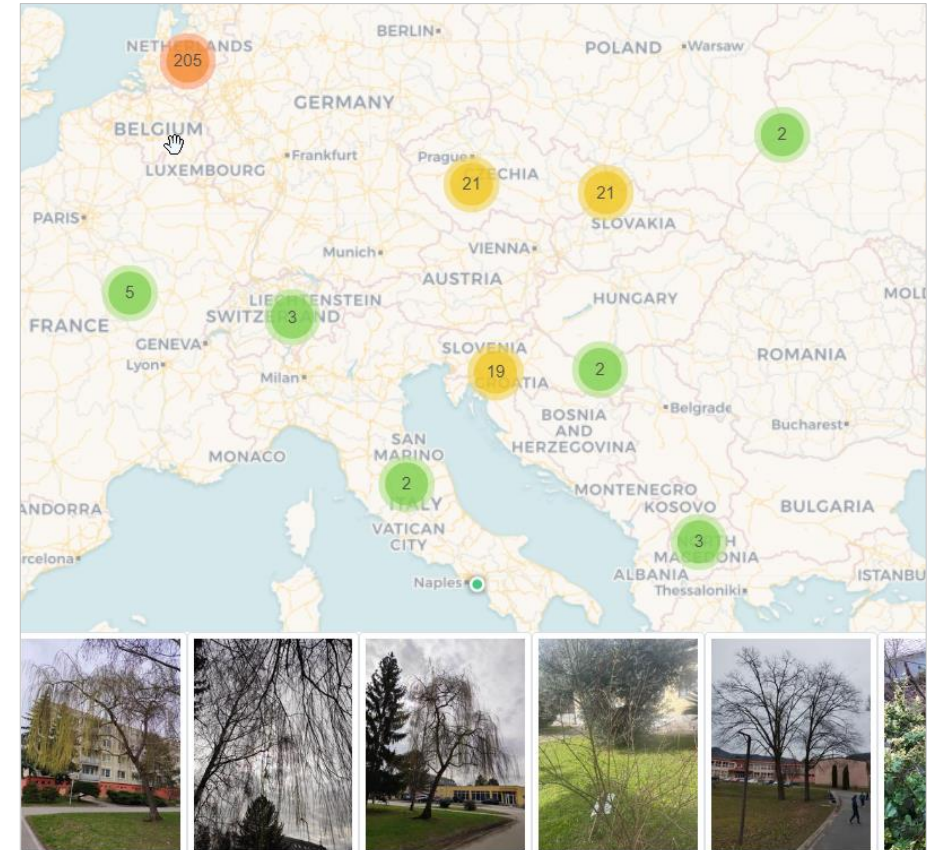




# GrowApp

- Easy and free mobile application  
[for Android](#) / [for iPhone](#)
- Time lapse videos
- Pictures and videos in the map

Use # to describe tree species and your school



<https://www.globe.gov/web/european-phenology-campaign/overview/growapp>

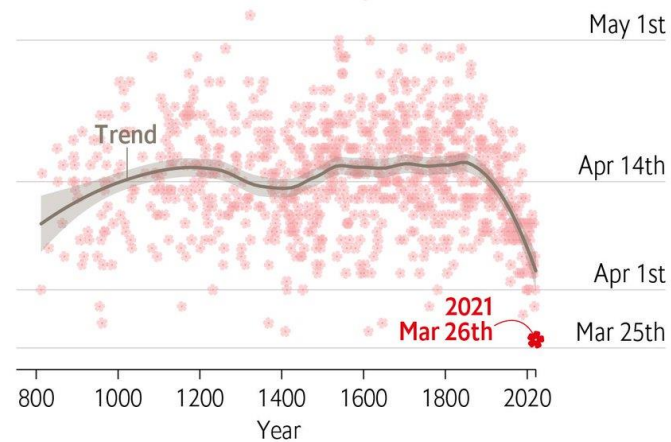
# What is phenology? Why trees?

?



## Japan's cherry blossoms are emerging increasingly early

Date of peak cherry-blossom bloom, Kyoto, Japan



Source: Yasuyuki Aono, Osaka Prefecture University

The Economist





# Activity: How tall is my tree?

Get to know your tree better - measure its height using

- a hand-made clinometer – easy to do using attached worksheet
- GLOBE Observer App: <https://observer.globe.gov/>



# Activity: Air Conditioned by Trees

Explore, how your tree affects the microclimate in its surroundings and how trees help us to cool the urban environment.





# Collaboration group

- International groups of 2-4 schools
  - Exchange of data and pictures by e-mail
  - Communication via ZOOM / Skype...
  - Student research projects
  - Practicing language skills

Let us know, how your cooperation is going!



*Credits: Lutsk City Ecology and Nature Center, Ukraine*

# Discussion Forum

**Share your pictures and results**

## How to do it?

- Sign in to GLOBE account
- European Phenology Campaign > News and discussion
- Choose „2024 Spring“
- Publish your post
- Add pictures

### European Phenology Campaign

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2024 Spring

Threads



# Webinars

10 April 2024



 **THE GLOBE PROGRAM**  
EUROPEAN PHENOLOGY CAMPAIGN WEBINAR

## Tree Explorers: Fostering Curiosity through Inquiry and Outdoor Activities

Discover the positive impact of inquiry-based learning and outdoor activities on student motivation. Gain valuable insights and lesson ideas from GLOBE Czech and Lessons in Grass educators.

10 April 2024



Picture by Marcelle Cassar, škola???, Malta

4 June 2024



 **THE GLOBE PROGRAM**  
EUROPEAN PHENOLOGY CAMPAIGN WEBINAR

## Our Spring with Trees

Teachers and students share experiences and inspiration from the Spring Campaign

4 June 2024



Picture by Ekonomska i trgovačka škola Dubrovnik, Croatia

Also invitations to other tree-related webinars

<https://www.globe.gov/web/trees-around-the-globe/overview/webinars>

# Padlet - inspiration from schools

See school project, videos, collaboration and a lot more...

Europe and Eurasia Globe + 15 • 34 minut


## European Phenology Campaign - Inspiration from GLOBE Schools

Get inspired by student activities and research projects

**Videos**

+

We enjoyed to observe the leaves to unfold and grow



YouTube

Spring phenology campaign through the eyes of students from GPQA Znojmo, Czech Republic.

0

Autumn Tree Campaign through the Eyes of GLOBE Students and Teachers

30 school teams from 20 European and Eurasia countries joined efforts in

THE GLOBE PROGRAM

2023 Autumn Tree Campaign

YouTube

2023 Autumn Tree Campaign through the Eyes of GLOBE Students and Teachers

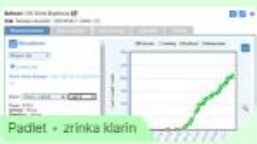
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Autumn tree activities by

**Padlets**

+

Spring collaboration of 3 schools




Padlet • zrinka klarin

- Elementary school Šime Budinić Zadar, Croatia
- CSOD - Slovenia
- Public School of the village of Letsitsvaye of Martvil Municipality named after Gela Chedia - GRUZIJA (Georgia)

0

Autumn campaign 2023



Presentace • branka žnidarič


European autumn phenology campaign 2023

Hello everyone! We have observed our two birch trees near schools in Đurmanec and Macelj. You can see our results here.

**Wakelets**

+


Spring 2023 Poltava school #38 Ukraine



wakelet.com

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Autumn cherry observations at Poltava school #38



wakelet.com

0


**Book Creators**

+

Virtual book of spring observations

Program GLOBE

Primary school Luhačovice




read.bookcreator.com

In their beautiful online book, a team from the Primary School Luhačovice captured budburst and unfolding of leaves as well as cooperation with partners.

1

GLOBE Germany



Science through a photographic journey


by Basundhara Maji

Otto-Friedrich-Universität Bamberg Germany

**Presentations**

+


Autumn campaign 2023 - Biotechnical school Maribor, Slovenia



At the Biotechnical school Maribor, we took the first measurement of the hazel tree on October 8th, and finished the measurement on November 17th, when the last leaf had fallen. Simon Gračner

0

Autumn campaign 2023 - Biotechnical school Maribor, Slovenija




At the Biotechnical school Maribor, we took the first measurement of the fig tree on October 8th, and finished the measurement on

**Story maps**

+

High school Prelog, Croatia




storymaps.arcgis.com

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**Carbon Activities**


+

Primary school Dragomelj, Slovenia



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What a tree needs to grow? How a tree absorbs and stores carbon?



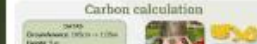
YouTube

Tree Growth Game by the Ecologist team of Kinashivska Secondary School, Ukraine led by Valentyna Shevchenko and Tetiana Hannych.

1

Birch tree


Carbon calculation



**Tree Reporters**

+

Genially




view.genial.ly

GLOBE во Македонија

If you can't leave the classroom, observe from the classroom. 2023 red rectangles 1, 2 and 3.

3

Poltava Daily News



YouTube

The report will take you to the Poltava school no.38 in Ukraine who will present their tree and activities.

4

Tree reporters Karina and Milda have known the interviewed tree already for





# Thank you!

Lenka Kleger, [lenka.kleger@terezanet.cz](mailto:lenka.kleger@terezanet.cz)

[www.globe.gov/web/european-phenology-campaign](http://www.globe.gov/web/european-phenology-campaign)

