



# **The GLOBE Program**

## **2021-2022**

**The photos capture highlights of the GLOBE community across Europe and Eurasia.**

**Enjoy the moments with GLOBE students, teachers, coordinators and trainers!**

The selection was compiled by the  
Europe and Eurasia Region Coordination  
Office





## TOGETHER WE ROLL THE GLOBE

The largest student scientific conference in the Czech Republic is associated with GLOBE. It is a part of GLOBE Games, an event that this year was attended by teams from the Czech Republic, Ukraine and the Netherlands. Students presented their research projects and received feedback from experts. Students had the opportunity to enjoy also lectures, excursions and rolling a giant Globe through the city.





## **GLOBE IS BOTH SCIENCE AND A GAME**

During the GLOBE Games, students enjoy both the game and the science. In Croatia, already 25th GLOBE Games took place in May, with 120 participants from 39 most active GLOBE schools. Students presented their research project and in a field survey competition tested not only their knowledge, but also their speed.





## **GLOBE STUDENTS ACROSS EUROPE EXPLORED ESTONIAN FORESTS**

The 2022 GLOBE Regional Learning Expedition took place in Käsmu, Estonia. The event brought together 160 students, teachers and researchers from 9 countries. Organized by current and former GLOBE students, the event offered a unique experience: Guided by scientists from Estonia and NASA, students acquired skills to investigate the local environment and the expertise to understand the data collected.





## **TREES WITHOUT BORDERS**

The European Phenology Campaign has been bringing together school teams from Europe and Eurasia for more than 6 years. Students pick a tree that is close to their home or school. Then, they watch the tree wake up in spring and burst into color in autumn. They share their research findings, gain new knowledge and build friendships at the same time.





## **NOTHING CAN STOP US IN EXPLORING THE NATURE**

**GLOBE Program is a welcoming place for all curious children and teachers, not depending on what their social background is. That is the conclusion from the project "Nothing can stop us in exploring the nature" run by GLOBE Slovakia. Funding from private sector allowed teachers from 4 schools with socially disadvantaged children to get trained in hands-on outdoor learning and receive GLOBE Teacher's Guide and research equipment.**





## BECOMING LIKE SCIENTISTS

Over 300 student groups submitted their own studies in the areas of biodiversity, climate change, soil, and water quality within the Student Conference in Switzerland. Out of them, sixty-two groups, were invited to present their results at the national conference. The event, which took place at the University of Bern, was organized in the format of a real scientific conference, with keynote speakers, sessions, and poster presentations.





## **FEATURING CLOUDS**

During the project "GLOBE Clouds Atlas of Ukraine" students observed clouds and other atmospheric phenomena. They learned about cloud classification and cloud formation processes, about their importance for the weather and climate on Earth. The students also admired the beauty of clouds – more than 800 photos were submitted for the Cloud Atlas and a large amount of data was entered into the GLOBE database.





## **DO YOU KNOW THAT TREES CAN TELL STORIES?**

In autumn, GLOBE students coming from 8 countries took role of journalists and interviewed trees in their neighborhood. The amazing stories that student reporters have learned from the trees were published at the GLOBE Tree TV or as posters at a Tree Magazine created by Europe and Eurasia GLOBE Office as a part of Tree Reporters Challenge.





## **NEW LANGUAGE FOR GLOBE OBSERVER**

Students and other volunteers around the world use the GLOBE Observer App to monitor changes in the environment. They can submit their data in 12 languages now to support scientific research on the Earth system. Thanks to the efforts of the GLOBE Lithuania team, also Lithuanian students will soon be able to use the app in their own language.





## **GLOBE KEEPS GROWING**

Just like a plant, a program too needs to be nurtured in order to grow. Thanks to the care of students, teachers, coordinators and scientists involved, GLOBE is thriving and reaching new countries. In the Europe and Eurasia Region alone, following countries have joined the program over the last 2 years: Portugal, Georgia, Armenia, Slovakia and Slovenia.

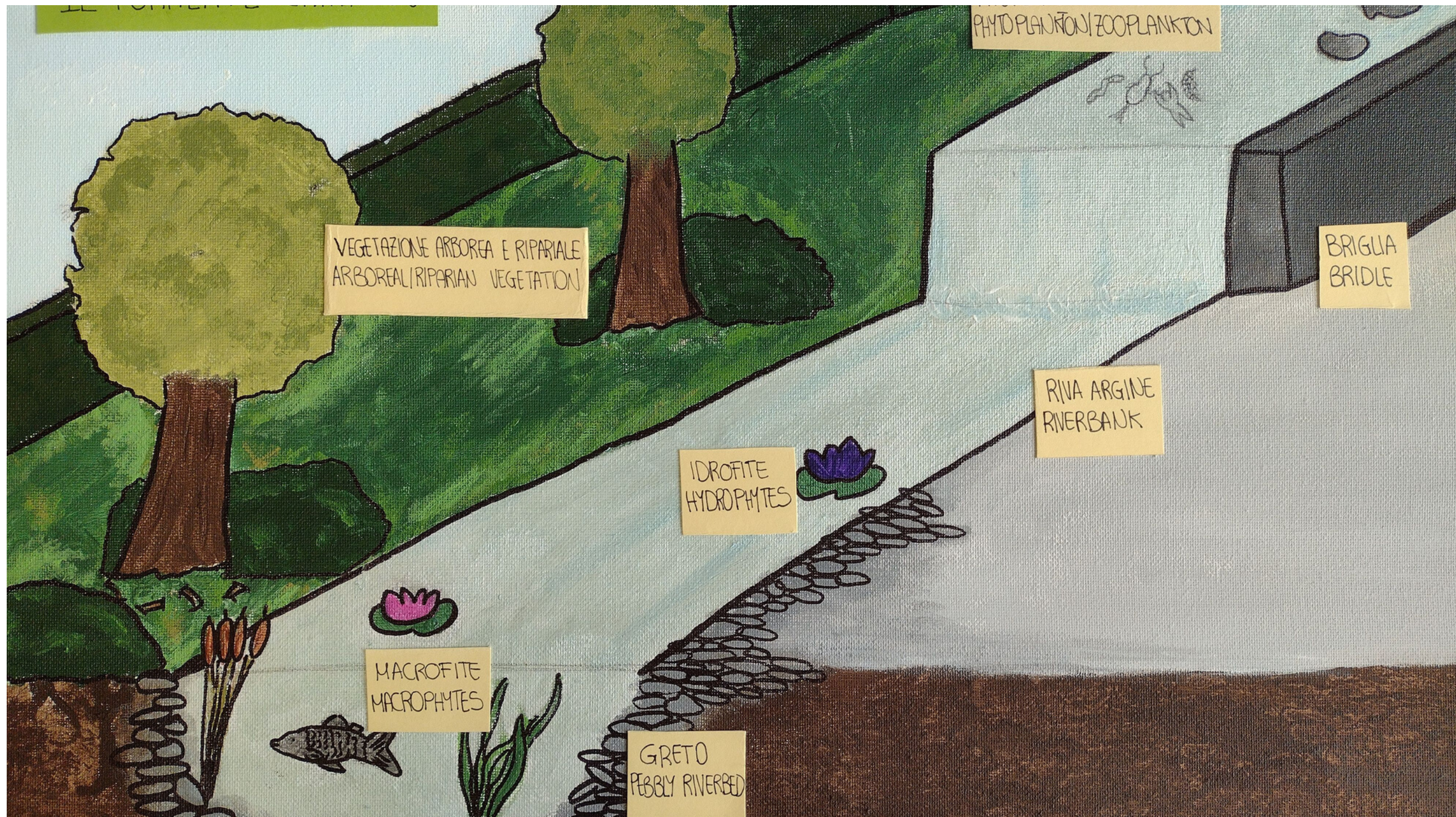




## SCIENCE COMMUNICATION AWARD FOR GLOBE

In November 2021, The GLOBE Program in Estonia received the Estonian Science Communication Award, in the category "Activities/Series of Activities Communicating Science and Technology." The aim of the award is to acknowledge and draw attention to individuals who promote science in Estonia, as well as boost the activities that introduce science and technology to the general public.





VEGETAZIONE ARBOREA E RIPARIALE  
ARBOREAL/RIPARIAN VEGETATION

PHYTOPLANKTON/ZOOPLANKTON

BRIGLIA  
BRIDLE

RIVA ARGINE  
RIVERBANK

IDROFITE  
HYDROPHYTES

MACROFITE  
MACROPHYTES

GRETO  
PEBBLY RIVERBED

## WATER MATTERS

Celebrating World Water Day with an event called Rivers in Spring has become a tradition for the GLOBE community in Italy. In 2022, the celebration was held online, making it a truly international event. GLOBE participants from Belgium, Croatia, Czech Republic, Netherlands, North Macedonia, Taiwan, Ukraine and Italy presented their projects and showed that water really matters.





## **WE LOVE OUR RIVER**

**Water is precious. That is why Water Bodies Challenge organized by GLOBE Europe and Eurasia in spring invites all students to celebrate water around us. Students observe lakes, rivers, seashore and other water bodies and tell others about the significance of the water area for both the environment and the community. Choosing one of the 9 tasks, students could also organize clean-up day, check water quality or map land cover.**





## **PASSION FOR WATER**

**With an incredible drive and passion, 11 schools from Georgia - all pretty new to GLOBE - joined the 2022 Water Bodies Challenge. They organized trips to rivers and lakes, each group making their excursion meaningful. They learned about water resources, documented environmental issues and completed a clean-up along the banks. Their enthusiasm was well captured in amazing videos and photos they contributed with to the challenge.**





## GLOBE SCIENCE FAIR

The annual GLOBE Science Fair is a fun and educational way for students from the Netherlands to share their research with scientists. Teams present their environmental GLOBE research to a jury and to their peer students – project has to meet the GLOBE Virtual Science Symposium criteria. The 2022 winning team received a cheque from the U.S. Embassy that allowed them to present their research at a GLOBE conference in the Czech Republic.





## **LOOKING UP TO THE SKY**

**The International Virtual Science Symposium (IVSS) provides students with the chance for sharing their research, discuss it with their peers, earn virtual badges, and receive feedback from a team of STEM professionals. Several schools from Europe and Eurasia participate each year, such as the Elementary School of Sime Budinica from Zadar, Croatia with their study "Clouds over my city".**





## **THE LITTLE EXPLORERS**

Started by two Croatian teachers, the project GLOBE Program Elementary K-4 promotes already existing GLOBE activities for the youngest students by connecting teachers in schools and kindergartens across the world. The aim is to start a collaboration on sharing expertise, resources and ideas in this area.





## **WE ARE GLOBE TRAINERS**

The network of GLOBE-certified trainers in Europe has grown significantly in 2022. Besides newly appointed trainers at the national level, there was also an opportunity to work together at the international Mentor Trainer workshop organized by the Regional Office in August. We appreciate all the Trainers, Mentor Trainers, as well as the candidates for their dedication to assist teachers to learn about GLOBE and join the GLOBE family.





## **RIVERS WITHOUT BORDERS**

Like rivers flowing across borders, the project "Only a tributary river?" connects several European countries. The project began as a collaboration of German schools that wanted to jointly investigate the quality, significance and development of the Lippe, a tributary of the Rhine. It has grown into an international cooperation between Germany, Croatia, Northern Macedonia and the Czech Republic, supported by the Erasmus+ programme.





## SCIENCE IN THE CITY

GLOBE students discovered cities to be living ecosystems as a part of the EU-funded project called PULCHRA. They explored environmental and sustainability issues in their cities and carried out real-life projects in collaboration with the local communities and with the support of experts and city authorities. They also took on the role of City Science Reporters to make their efforts known and to inspire their neighbors and friends.





## **HOW CLEAN IS THE AIR WE BREATHE?**

The GLOBE Air Quality Campaign runs twice a year in Ireland, and is based on monitoring nitrogen dioxide, a traffic-related pollutant at schools. As a part of the campaign, students relate the air pollutant levels to the weather conditions and traffic patterns in the school neighborhood. Over 300 teachers, representing every county in Ireland, registered to participate in a GLOBE Air Quality Campaign during the 2021-2022 academic year.

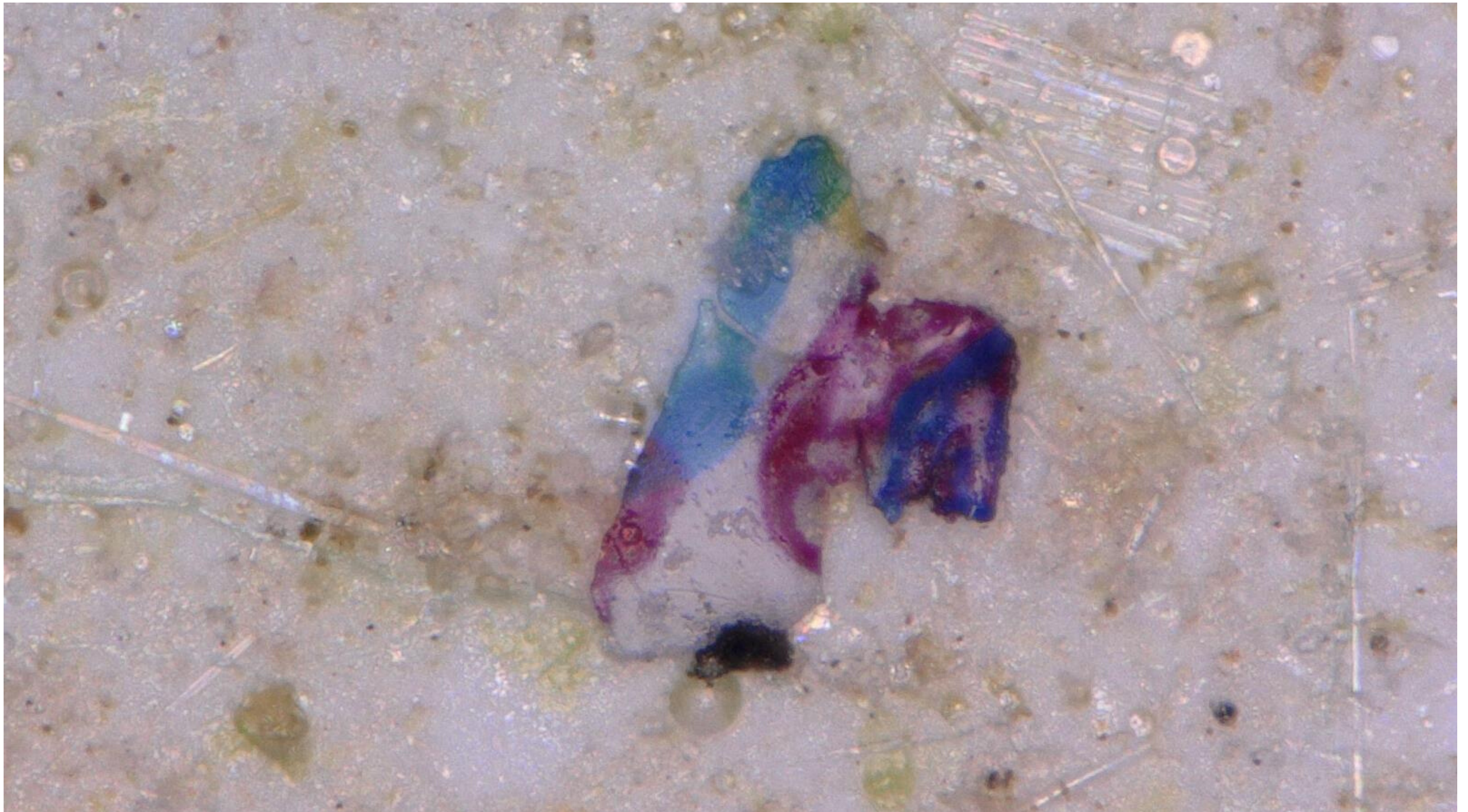




## **HOW WARM IS MY CITY?**

Urban heat island effect is a raising phenomenon worldwide and Kfar Saba Municipality in Israel is no exception. Right there, students (from the youngest ones to adults) cooperated on a fascinating program. They conducted a scientific study of urban heat island in their immediate environment - such as schoolyards and community gardens - following the monitoring protocol of NASA scientists.





## **WHAT IS HIDDEN IN THE WATER**

Microplastics have become a wide-spread environmental concern, being tracked all around us. Thanks to a support from GLOBE Italy and Deakin University, Australia, a draft protocol for microplastics monitoring in water was developed, with the aim of adding it to GLOBE Hydrosphere protocols in future. Wide range of schools joined the piloting phase of the project to test the protocol in practice and provide feedback to the authors.





## **TREES ARE OUR FRIENDS**

Karina and Milda are students of the Lithuanian Gymnasium Jonava R. Samulevicius. In their GLOBE project they investigated the changes and characteristics of birch trees. But they didn't stop there. They decided to turn their research into a story with a strong message - they made a video addressing all of us with following words: "Trees are our friends, let's plant them, protect them and love them."





## TAKE THE OUTDOORS INDOORS

The education unit of Xrobb l-Għagin park organized virtual fieldwork to “take the outdoors indoors” during the pandemic. Three different fieldwork sessions were delivered from the outdoors at the park to more than 1600 students and educators across Malta and Gozo in state, private and church schools. Students experienced how cool it is to do science from the palm of your hand, especially with the user-friendly GLOBE Observer App.





## **INTERNATIONAL COLLABORATION**

**A collaboration between two GLOBE countries, Malta and Israel, brought together students, teachers and representatives from the U.S. Embassy and the GLOBE Program. The initiative involved four schools, which together focused on atmospheric and soil research. In addition to scientific discovery made by students, the participants also learned about diverse culture, language and traditions of both the countries.**





## **GLOBE RESTART**

**There were 65 teachers attending the 3 day-long GLOBE training in Ohrid, North Macedonia. It was another great event organized with the aim to re-start GLOBE in the country, which proved to be a successful mission of the coordinator's team over last 1,5 years. There are also several new Mentor Trainer and Trainer candidates coming from North Macedonia, who will allow the national GLOBE network to grow and become sustainable.**





## **EXPLORING NATURE - IN NATURE**

Spending time outdoors is essential for understanding of and building the vital connection to nature. Schools in Slovenia are committed to outdoor education, and now, they are also exploring the environment with the GLOBE Program. Although Slovenia has only been involved in GLOBE for a short time, the range of school research projects is truly wide.