

Plastic Pirates - Go Europe River sampling: step-by-step guide for teachers

Interreg

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What is Plastic Pirates campaign?

- The goal of the campaign is to raise awareness and learn more about plastic pollution. Since rivers and streams are pathways for plastics entering the sea, it is important to understand their role and how much litter is being transported this way
- By joining Plastic Pirates you investigate your local river or stream and “capture” plastic litter before it reaches the sea!
- Find out more (in ENG): <https://www.plastic-pirates.eu/en>

What is Plastic Pirates campaign?

- The campaign was developed in Germany in 2016 and has now become a Europe-wide campaign with more new countries joining over the years
- The campaign emphasizes the importance of citizen science and international research collaboration
- Uniform guidelines and working steps for all participants ensure that throughout Europe the data collected is comparable and more locations appear on the Plastic Pirates map: <https://www.plastic-pirates.eu/en/results/map>

How does it work?

Young people interested in learning more about the environment and science get the opportunity to do their own research:

- identify a river or stream nearby to explore
- collect litter data
- upload it to a shared database

Plastic Pirates samplings can be done in spring or autumn. Participants have to follow a checklist and note down information on litter types, quantity and other relevant details - like scientists do

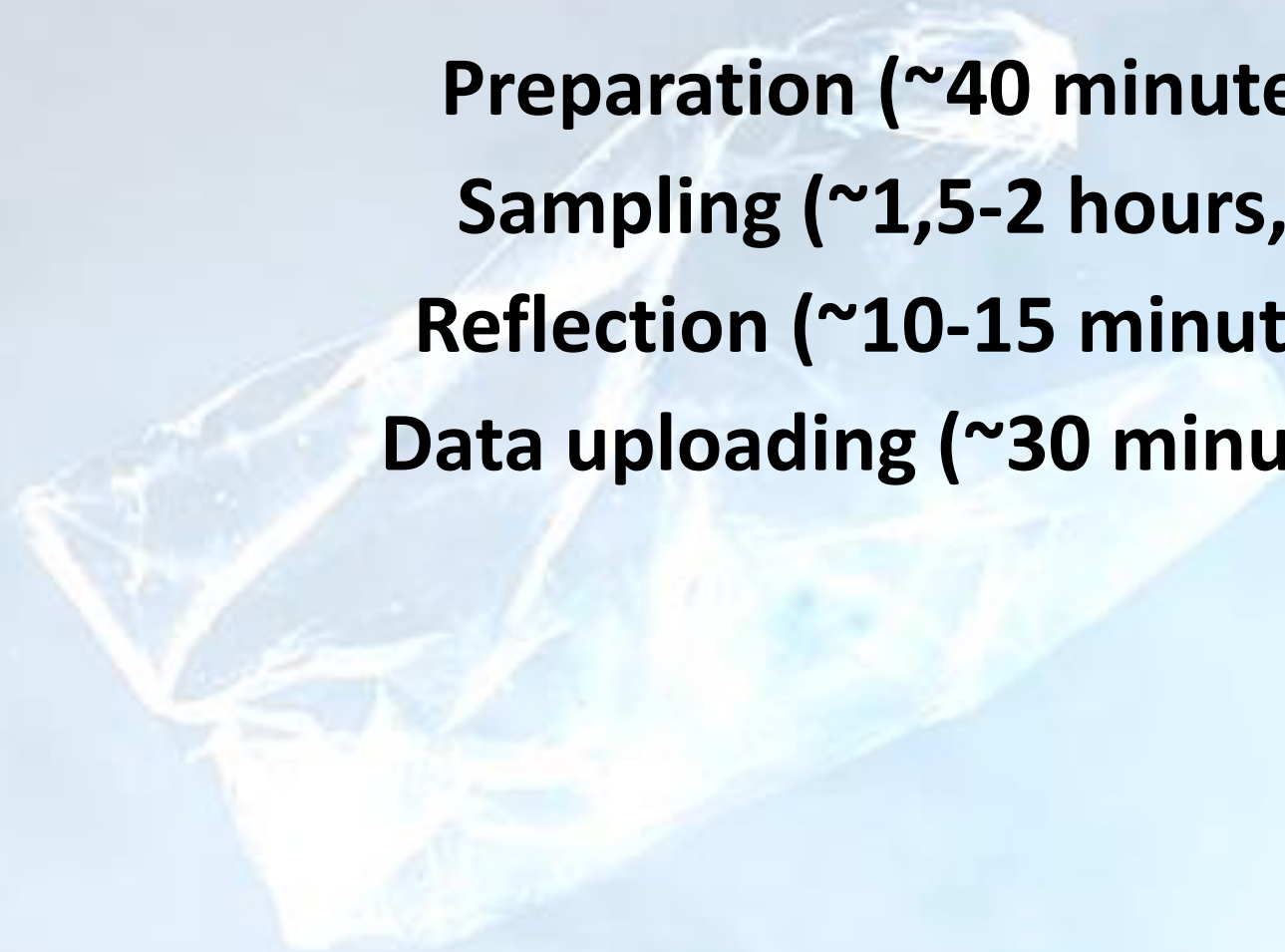
There are 4 steps of the whole process

Preparation (~40 minutes, indoor)

Sampling (~1,5-2 hours, outdoor)

Reflection (~10-15 minutes, indoor)

Data uploading (~30 minutes, indoor)



Preparation I

- Discuss in class - what do you know about plastic pollution in the ocean?
- Do you notice a lot of plastic litter in your surroundings? What kind of litter do you see most often?
- Do you know what microplastics are?
- Where are the closest streams and rivers to your school? How do they connect to the sea?
- More questions and ideas for discussion can be found in the teaching materials and worksheets for teachers (ENG): [https://www.plastic-pirates.eu/sites/default/files/document/2022-09/Plastic Pirates Lehrmaterialien Web 0.pdf](https://www.plastic-pirates.eu/sites/default/files/document/2022-09/Plastic%20Pirates%20Lehrmaterialien%20Web%200.pdf)

Preparation II

- Choose your school team name!
- All together watch the explainer video and learn about the Plastic Pirates tasks: <https://www.youtube.com/watch?v=nMlwWM5o4MY>
- Divide into 4 thematic groups with specific tasks for each group
- Each group should have minimum 3-4 people

Preparation III

The aim of Group A is to identify how much macro plastic can be found along riverbanks in 3 various zones

The aim of Group B is to identify the variety of plastic than can be found in a certain area along riverbank. In an area 20 m x 50 m we collect all waste and categorize the plastic found

The aim of Group C is to examine two different types of waste: larger floating waste and microplastic

Group D has the important role to document the sampling with photos or a short video, investigate the area, seek out and identify sources of waste, estimate the effects of the weather, secure data and photographic evidence and interview the other groups

Preparation IV

- It is suggested to watch explainer video for each group

Group A – [Waste on the river bank](#)

Group B – [Variety of waste on the river bank](#)

Group C – [Floating waste and microplastics](#)

Group D – [Team of reporters](#)



Preparation V

- Understand the video and read the respective checklist for each group
- Note what materials/ tools your group will need, prepare them
- Using Google Maps make sure that the chosen stream or river has enough coast area for Group A and Group B activities
- Make sure that for Group C there is an access point to water for securing the microplastic net (a bridge or a pier)

Sampling

- Plan your time - you will need around 1,5-2 hours for whole sampling
- Find area for each group
- Follow the tasks on your group checklist and make notes accordingly
- You can re-watch your group explainer video (scan QR from the checklist)
- Make sure to take photos - all findings must be recorded
- Sort the waste (group B) - on the spot or bring it for sorting later in classroom (if the weather conditions aren't so good)
- After sampling collect and close the microplastic net
- Hang the net in a way it can get dry and then send it by post to the laboratory of Institute of Aquatic Ecology

Reflection

Shortly after the sampling – the same day or later – please collect the joint group answers to the following questions:

- How has the campaign changed your view of the issue of plastic waste?
- What did you find particularly surprising during the programme?
- What do you regard as the greatest challenge?
- Who would you like to talk about the project, and why?
- What have you learned about yourself throughout the project?
- How has your understanding of the term 'science' changed over the course of the project?

Data upload – as soon as possible with fresh memory

This can be done by a teacher or responsible student, but supervision is needed

Gather the photos and notes from all 4 groups (please include photos of checklist pages, too) as well as answers to the 6 reflection questions

Add all information here (ENG): <https://www.plastic-pirates.eu/en/results/data-upload>

Thank you for participating!

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