BIOPROFILES

Mapping of illegal dumping

Introduction

Landfills are divided into legal (with strict rules and standards applied) and illegal (black, wild dumps). Black landfills are a serious environmental problem and are occurring in almost every community despite awareness, waste separation and recycling technologies, and collection yards. Black landfills are created in nature or in the streets of the city from loose waste. Besides the aesthetic point of view, illegal landfills have a negative impact on plants and animals in its vicinity, threatening water, soil and air quality, as well as human health. Despite penalties for illegal dumping and various voluntary initiatives, their number has not declined.

Learn about the problem

Use internet, (scientific / popular) literature, or in collaboration with experts find available information on illegal dumping. Also focus on the following questions:

- How would you define illegal dumping?
- What are the causes of illegal dumping?
- Where do such landfills mostly occur?
- What type of waste most often occurs on illegal landfills?
- What is their impact on the environment?
- What is your city doing to remove illegal landfills?

Recommended resources

Source 1: TrashOut	Source 2: The waste trade – legal and illegal	Source 3: How can waste policy contribute to a resource-efficient economy?

Verify the occurrence of a problem in your area with your own research

Goal

Students know what illegal landfills are and can identify them. Using the app they can map their occurrence in their neighbourhood. Pupils are aware of the risks associated with the occurrence of illegal landfills and can report illegal landfill to responsible persons / authorities.

Tools & Materials

- online maps (e.g. Google maps) or territory map
- mobile phone (with internet connection) or camera
- TrashOut application or similar
- mobile application for tracking path
- board / flipchart / tablet or similar

Implementation

Choose a territory where you will map illegal landfills (e.g. neighbourhood of school, city district, village). Adjust the size of the territory to the number of people involved and the time you can spend on mapping. Mark the boundaries of the selected territory on the map and divide it into smaller sections that you assign to pairs or groups of pupils. Before starting the mapping, mark the TrashOut dump already reported

in the printed map. Subsequently, you can use the photos taken during the mapping process to create a presentation or a dashboard.

Mapping process

Use the map to review the allocated territory and try to estimate the locations of possible dumps. Plan a route to check for previously reported landfills while checking for new tracks. Take the printed territory map and mobile phone with Internet access and TrashOut installed to the field. Gradually navigate the entire route and record illegal dumps into the application and printed map. If you find a new illegal dump, follow the instructions in the app (add a photo, enter the landfill size, waste type, landfill availability, location and additional information). After completing mapping of individual parts of the territory, process a map of the entire territory indicating all the illegal landfills you have discovered.

Analysis of results and proposal of solution

Did you find illegal waste dumps around you? What kind of waste prevailed on them? Where did they occur most often? What is the likely cause of their occurrence? Do you think there is a way to prevent the emergence of these landfills? What solutions would you use to remove them? Write down your ideas and select the ones you can implement.

Implementation of the solution and evaluation

Did you manage to implement the selected solution? If so, how did you get the result? Did you inform the community / landlord about illegal landfills? How did your friends and family react to your activities? Have you encountered understanding or vice versa? Have you managed to remove any of the waste dumps? Do you think there is a better / more effective solution for the problem?

How did you feel after implementing the selected solution?

Frustrated	Disappointed	Rather Negative	Neutral	Rather Positive	Satisfied	Enthusiastic
◯	◯	◯	◯	◯	◯	◯

Publicity

Record and share photos on social networks with #mybioprofile during the activity.
Help others to join us.