FOODSHIFT Pathways

LET'S TAKE CARE OF BEES!

INTRODUCTION

In this Open Learning Scenario, the students are going to realise he importance of bees as pollinators for the food system, identify honeybees from other types, observe the environment near the bees, make conclusions about the plants honeybees prefer and create a bee-friendly environment in school.

THE ISSUE

1. Watch the video with your students.
2. Ask your students which are the issues being addressed in the video.
3. Ask your students if they ever think about the importance of bees as pollinators.
4. Discuss with your students if they are aware of the impact to the environment/food system if bees will extinct (e.g. how the offers in the supermarket, or the grocery store, would be different)

INTO THE COMMUNITY

5. Discuss with your students the best methodology to learn more about bees and pollinators.
6. Go outside the classroom and try to find bees.
7. Discuss if the school yard is bee-friendly.

AIMS

• To identify the importance of bees as pollinators for all food products

• To raise awareness among the school and local community about the importance of bees as pollinators and challenges for their extinction

SUSTAINABILITY COMPETENCES

- Critical thinking
- Developing creative solutions

SOCIETAL ACTORS

- Families
- School community
- Polinizadores em ação (or other NGO about bees' protection)
- Honey producer
- Local authorities

KEYWORDS

Biodiversity, food, pollinators, bees, honeybees, citizen science

THE CO-CREATION PROCESS

8. Back in the classroom, discuss with students which actors they could consult in order to know more about pollinators, different types of bees and the importance of saving bees.
9. Help student to invite the identified societal actors (e.g. Ciência Viva with the project "Polinizadores em ação" and a fruit producer or a honey producer) for a co-creation event.
10. The co-creation with the expert on pollinators taking place in the school outdoors; the event with the fruit / honey producer taking place where he works.
11. Both events are informal moments where the students have the same voice as the other participant and discuss possible solutions for the problem of the reducing number of bees.

THE (SUGGESTED) SOLUTION

12. One solution to the problem is to count the number of bees in the school yard, with the methods shown by the pollinators expert.
13. Present the number to the school director and suggest the maintenance of the plants that bloom in the spring in the school yard (instead of being cut by the gardening company).
14. Count the number of bees when there are flowers in the school yard.
15. A prototype for this solution can be a graphic representation presenting the before and the after letting flowers bloom.
16. These results will be presented in the school sciences fair, on a Saturday morning at the local market and to the local authorities, in order they could change the "plant cleaning" in the green spaces.
17. Ideally the students should participate in the monitoring of pollinators through app, like FITCount, and promote this science citizen in their divulgation events.

AGE RANGE

13-16 years old

SUBJECTS

Biology

Citizenship / Civic participation

TOPICS

Citizenship / Civic participation

Sustainable development

Biology: biology of insects, bee, biodiversity, study of the environment

SUSTAINABILITY COMPETENCES

- Valuing the environment
- Collaborating and connecting
- Critical thinking
- Developing creative solutions

SETUP

Most of the activity will be developed outside the classroom.

Ideally, when students present their results to the local community, in the market, there should have games about pollinators and honey or fruit tastings for the arise of interest.

MATERIALS

- Rope and watch
- Registration form
- Stationery to be used in the co-creation event
- Cell phone