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### Introduction:

This lesson plan aims to reate awareness of the importance of bees for biodiversity and promote students' active citizenship.

### Objectives or Learning Outcomes

Students will be able to:

- investigate the relationship between human action and the environment
- prepare creative and aesthetic presentations and infographics using digital tools.
- participate in debates supported by data analysis.

### Time required:

- Session 1 (50 min): Introduction to theme and to SDGs
- Session 2 (50 min): Introduction to project methodology.
- Session 3-8 (50 min each): Conducting research and creating awareness campaings.

### Resources required:

- Computers/tablets, [PPT](#), news, digital tools (Power Point, Canvas, Dreamshaper), reused materials to make signs.



12 to 14  
Years old



# Activity

## Classroom session

1

- Introduction to the theme and contextualisation of SDGs.
- The teacher reads a **motivational text** to students and they analyse it together.
- The teacher appeals to the need for each student to be an active agent in achieving each of the SDGs, which are explored and discussed in this lesson through group analysis.

## Classroom session

2

- The teacher asks students to create small working groups.
- Using the PPT, the research methodology is introduced.
- Students are asked to work with Dreamshaper.

## Classroom sessions

3 - 8

- Students conduct research about the importance of bees to biodiversity and focus on their school or home environment.
- Students create awareness campaigns (posters, infographics, social media posts) showing their results.
- Students are asked to study the concept of pollinator space, its importance and how to create it. Environmental associations or NGOs could be contacted for this step.
- Students create a pollinating space in the school.

## Evaluation and Assessment

Students do their presentations to other groups in the school. The teacher provides a self assessment grid which will help to understand how students evaluate their individual and group performance. Also, it will provide students' perceptions on how the activity had an impact on learning and consolidating knowledge.

## Suggestions of variation

Students could present their reserach to parents.

Community awareness campaingns on the importance of bees in biodiversity.

## References

<http://www.boticasparque.pt/dados.php?ref=abelhas>

<https://www.revistaprosaversoarte.com/a-importancia-das-abelhas-e-porque-precisamos-delas/>

This lesson plan was selected from the [2020 Eco-Schools competition](#) in which teachers were invited to develop and submit lesson plans that promote action-oriented pedagogy about specific Sustainable Development Goals (SDGs).

## **Motivational text for students**

The recent times have made us reflect and think how small, fragile and vulnerable we are and everything we take for granted has been called into question. It is time to rethink how we can change to improve our world.

The present has stagnated... the world has stopped and the future seems uncertain. The need to rise towards "our best possible version" by creating synergies of support, friendship, solidarity, developing new skills and a more humble way of looking at the world and how to preserve it.

We know that nothing will be as before, but the change has to be positive and balanced.

In the next few lessons we will see how we can build a new way of living, in better harmony with ourselves, with others and the planet. We will try to find ways of action and intervention that create a more balanced and better world that aims to achieve the Sustainable Development Goals.



**Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss**

# Project...



# A bee is not just a bee...

## SDG 15 IN THE EU: LIFE ON LAND

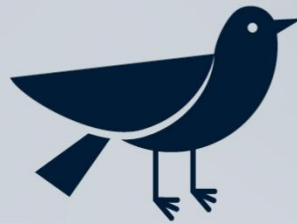
Forest area *in 2015*



**41.9%**

of total land area

+ 2.6 pp  
since 2009



**93.3**

Index 2000 = 100

-1.8 index points  
since 2011

Common bird index *in 2016*

Soil erosion by water *in 2012*



**5.2%**

of the total non-artificial  
erosive area

- 0.8 pp  
since 2000

**1 BEE COLONY  
CAN POLLINATE  
300 MILLION FLOWERS  
EACH DAY**

**BEES POLLINATE  
FRUITS, NUTS,  
AND VEGETABLES**

**BEES POLLINATE  
ABOUT 90% OF  
THE WORLD'S  
NUTRITION SUPPLY**





All bees:



Estimated  
**1/3 of  
food**  
is pollination  
dependant



**Make 6,000**  
tonnes of honey



Pollinate **70**  
types of crop



Contribute  
**£400** million  
to the economy

A colony:



Pollinates  
**4,000 m<sup>2</sup>**  
fruit trees



Makes avg  
**14kg**  
of honey



Contains  
**50,000**  
bees

# WHY BEES MATTER



BEES POLLINATE  
MORE THAN **100**  
TYPES OF CROPS  
IN THE US

**1** OUT OF **3**   
BITES OF FOOD **DEPENDS**  
ON POLLINATORS

**BEES ARE VITAL** FOR THE ALFALFA AND CLOVER  
THAT FEED CATTLE. WITHOUT THEM, THERE  
WOULD BE LESS BEEF, MILK AND **CHEESE** 

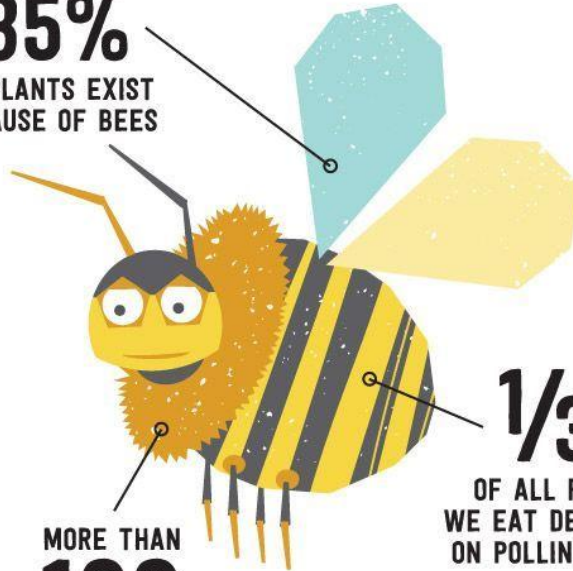
THE FUTURE OF FOOD DEPENDS ON HEALTHY BEES!  
LEARN MORE AT [WHOLEFOODSMARKET.COM/SHARETHEBUZZ](http://WHOLEFOODSMARKET.COM/SHARETHEBUZZ)



# WHY BEES MATTER

**85%**

OF PLANTS EXIST  
BECAUSE OF BEES



**1/3**

OF ALL FOOD  
WE EAT DEPENDS  
ON POLLINATORS

MORE THAN  
**100**

TYPES OF CROPS ARE POLLINATED  
BY BEES IN THE US—INCLUDING  
THE CLOVER AND ALFALFA  
THAT FEED OUR COWS

[WFM.COM/POLLINATORS](http://WFM.COM/POLLINATORS)

