

Chapter 2

Science lesson: Building bee houses!

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Summary

The decline of the number of bees in Mallorca is something that worries us. For this reason our school decided to build bee houses and to place them in the mountains of the “Serra de Tramuntana”. This activity was done with our 2nd of ESO students (aged 13-14 years old) in April 2018.

Building bee houses!

Introduction

It's well-known that pollinators are very important for our ecosystems because they help support flora and fauna at every level of the food chain. Bees are amongst the most important pollinators of all. Building bee houses is a great way to increase pollinator habitats, as they can provide shelter and nesting areas for native bee populations.

Learning objectives

- To be able to identify different kinds of bees.
- To learn all about pollinators and their importance in the ecosystems.
- To be able to work in group.
- To enjoy our environment and nature.

Resources

Materials to build the bee houses.

Students must bring their water and food supply and dress accordingly to the outdoor activity.

Activity

Step 1 (in class): 1. Discuss with the class what they know about bees: Where would you normally find bees? What types of bees do you know? What purpose do they serve? How can we protect bees? 2. We read this article: "Asian hornet found in Majorca for the first time"

<https://majorcadailybulletin.com/news/local/2015/10/07/42004/asian-hornet-found-majorca-for-the-first-time.html>

3. Divide the class into four groups: each group will have to build a bee house. Here you are the instructions:

Before you start, make sure the wood you use is untreated, as treated lumber may contain toxic chemicals harmful to bees. We used a combination of purchased wood and logs from trees native to the area to make our bee houses.

1. Decide what type of structure you want to create. Bee houses come in all shapes and sizes.
2. Cut the remaining wood into blocks at least 18 cm long. This is what you will use to fill in the structure.
3. Drill holes in the blocks, this is where the bees will actually live. Make sure you have drill bits long enough to drill 16 cm, as that is the depth needed for bees to nest inside a hole. We used three different drill bits to create a variety of holes. Make sure to reverse the drill half way through drilling the holes to alleviate the sawdust build up within the hole.
4. Place the blocks inside the structure, making sure the holes face out.



Step 2 (outdoor lesson): 1. Find a wooden area, preferably in the shade. 2. Place your bee house there. You can cover the structure with wire to prevent the blocks from falling or being taken out while still allowing plenty of space for the bees to come and go.

Comments from the learners' surveys

Our students enjoyed the trip very much and realised the importance of knowing that we must protect our bees. Many didn't know bees were so important!

Final remarks

An outdoor lesson is always welcome, and in this case the activity was particularly well-received as students enjoyed making their bee houses and seeing them installed.

Supplementary material

Types of bees: <https://www.buzzaboutbees.net/types-of-bees.html>

Creating a bee house (with pictures):

<http://www.instructables.com/id/Creating-a-bee-house/>