



# **INVISIBLE GARDENERS – THE USEFUL INSECTS IN THE GARDEN**

## **MAIN THEME: THE ECO-SYSTEM**

### **SHORT DESCRIPTION OF THE ACTIVITY:**

In this activity, children will be introduced to the concept of the useful insects in the garden that contribute to the life of the Garden and development of the delicious harvest. The children will learn about some of the most useful inhabitants of the garden - bees, ladybug, spider, mantis, firefly, earwig and Mayan beetle. They will look for them in the garden armed with magnifying glasses and draw them using their fingers. They will have fun playing a game that recreates the motions and lives of useful insects, and eventually make a hotel for these insects using an old wooden crate, branches, pebbles and other handy natural materials. They will then place it in the garden to serve as a shelter for these insects.





**TARGET AUDIENCE:** 10-12 children aged 3-6 years

**TEACHERS INVOLVED:** No. 1 and No. 1 assistant

**WORKSHOP DURATION:**

30 minutes for preparing the activity


30-40 minutes for the activity with the pupils





## **OBJECTIVES:**

In this activity the children will:

- learn about the concept of useful insects in the garden;
  - learn to recognize some of the most useful inhabitants of the garden - bee, ladybird, mantis, firefly, earwig, ant, spider;
  - learn to use safely magnifying glass for exploratory learning;
  - develop their gross and fine motor skills through motor activity and group play;
  - develop creativity and sense of collaboration by working with natural materials to build the hotel for useful insects;
  - enrich their vocabulary with new terminology.
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**METHODS:**

Presentation by the teacher.

Working with questions, answers, and conclusions.

Game "I am a useful insect" and gross motor activity.

Research learning by exploring and recognizing real objects - exploring insects in the garden.

Practical session to create an insect hotel.





## **PREREQUISITES:**

This can be done indoors in the classroom, and the insect search activity in the garden is replaced by drawing insects on flipchart paper.


### **WARNING: Safety & Security Rules**

When removing children from insect surveillance, it is important to give and follow strictly the safety instructions, such as:

- the magnifying lens is used only in days when there is no direct sun to which the children will direct it.
- we do not touch or kill the insects we see in the garden, but we only watch them!

If there is a possibility and more assistants, an adult can take a picture, i.e. to engage in photo-hunting.

Before you bring the children to the garden, it is desirable to investigate whether there is an opportunity to encounter poisonous insects.






Quantities	Materials	Notes
1 set with 6 cards - one for each insect	Printed pictures with photos of useful insects	
Sufficient for every child	Flipchart or individual sheets of paper and drawing material	
2-3	Magnifying glass	
1	Photo camera or photo phone	
1 set	Insect Hotel Materials - Wooden crate, branches, pebbles, leaves, straw, cones and other natural elements with a spruce structure or holes.	





# HOW TO CONDUCT THE ACTIVITY

## PHASE 1 - GETTING STARTED: (Time: 10 minutes)

- The teacher introduces and informs the children that they will explore life in the garden.
  - Puts the frameworks and rules of activity.
  - Declare safety rules!
  - Teacher informs kids that today they will explore the theme of useful insects in the garden - tireless gardeners.
  - The teacher asks questions to identify the cognitive level and capacity of children, how familiar they are with the insect theme, what they know and what their readiness to engage is.
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## PHASE 2 - DEVELOPMENT: (Time: 30 minutes)

The teacher tells a story that in the garden besides us the people, there are other beings who work tirelessly to help grow the plants and the delicious harvest. Children try to guess who these beings are - insects. There are useful insects that are like invisible gardeners (because they are very tiny) and it is very important and nice to live in our garden.

Teacher shows the children colorful pictures of some of the useful insects (bee, ladybug, mantis, firefly, earwig, ant, spider). In a few words, the lecturer tells exactly what is useful for each of these insects: the ladybug eats aphids, the bee pollinates the plants, the mantis eats the harmful insects, the spider weaves the cobwebs on whose strands droplets keep dew and moisture during the hot summer months, the firefly feeds on small lice and pests, the ant is a cleaner, it processes the organic matter and helps with the loosening of the soil. 6-7 min.





## PHASE 2 - DEVELOPMENT: (Time: 40 minutes)

Once the discussion has been exhausted, the teacher invites the children to a game in which s/he calls the name of an insect (from maps) and shows his movement, and all children move and dance like her/him. In this way the children mimic the movements and eventually the sounds of some of the useful insects. 5 minutes

After the game, the children sit again in a circle or on the table, and the Teacher gives instructions for the second part of the session - an exploratory trip to the garden to search for useful insects. Each child receives a magnifying glass and instructions for safe use. Children receive instructions not to touch and kill the insects that they find.

Each child explores the ecosystem of the garden independently. When finding interesting insects, children signal the teacher and, if possible, explore and comment on it. 10 min

The last part of the activity includes the assembly of an insect hotel, which consists of a recycled wooden crate and natural materials that children will find in the garden or in nature (branches, stones, cones, leaves, straw, etc.). 10 min



### PHASE 3- CONCLUSION AND EVALUATION (time: 10 minutes)

At the end of the activity, all children sit together in a circle and the teacher asks questions to recapitulate what they have learned, to repeat the new terms, and share their impressions and emotions; to put down new and interesting things that happened in the garden if they have a Garden Log.

The teacher writes down suggestions and comments that come in the process of working with children. S/he notes down ideas and guidelines for subsequent activities with this group of children.





## EVALUATION OF THE LEARNING RESULTS

**Learning objective:** children know the concept of useful insects and can recognise some of them.

### Teacher's questions:

- Draw some of the useful insects in the garden
- Write down the names of some of the useful insects in the garden (5-6 years)

### Graphics:

- A picture of a garden with different plants in it - flowers, vegetables
- Separate pictures of the following useful insects and their names:
  - bee, ladybird, earwig, firefly.





## NOTES

Useful information about insects that help in the garden.

One of the best ways to prevent pests in the garden is to encourage their natural enemies. Cultivating plants with pollen and nectar and providing protection for these useful insects is very important to make the garden biological.

Here are some of the useful insects for which we need to provide the opportunity to be in the garden.

**Ladybug:** There are many types of ladybugs, but the most common are red with black dots. Besides being beautiful, ladybugs feed on some of the most common pests in vegetable gardens - leafy and thyroid lice. You probably did not know, but the ladybird's larva eats nearly 3,000 lice in life. That is why they are extremely irreplaceable helpers in the garden.

**Mantis:** They are kinsmen of cockroaches and ants. But, unlike them, the mantis not only does not hinder us in the garden but will help us grow vegetables. They feed on all flies, beetles, aphids, spiders.

**Fireflies:** Fireflies are the luminous charm of the cool summer evenings in the garden. And they are also useful predatory insects that destroy various harmful animals. The most lucky are the larvae, which attack mainly land snails, but also caterpillars and worms with a soft body.

**Bees:** Without bees, mankind would not know what the taste of the fruit is because they work hard to pollinate all the trees and the flowers. In addition, from the pollen that gathers from the flower plants, they make honey.

**Shields:** Shingles predominantly inhabit the gardens and feed on other insects, plants, rotten fruits and litter. This is their function that can help you in growing flowers and vegetables.

