

Insect Employment Office

Please use this checklist to confirm that all of the parts of this station are in this bag both when it is unpacked before the OSF Science Night AND when it is re-packed after your event.

- Table sign, laminated
- Explanation /What to Do sheet, laminated
- 12 picture cards, laminated (6 orange for Georgia temperate forest, 6 green for the Ecuadorian rainforest) with information and Velcro on the back

You will need to set up the Passport Question with Eastern Woodpeewee at this station. It can be found in the PASSPORT bag.

Two display boards, the Georgia Temperate Forest and the Ecuadorian Rainforest, Job Advertisement Boards should be placed at this station. These boards have two sets of Velcro. The set on the side panels are there to simply “hold” the six cards before it is decided where to place them correctly. The cards could also just be put on the table in front of the display.

What you will need to provide for this activity station:

- Tape to attach table sign

INSECT EMPLOYMENT OFFICE GAME
Georgia Forest Branch
Tropical Rainforest Branch

Explanation/Background:

Each animal and plant plays an important role in the ecosystem of its habitat. This function contributes to the survival of the whole ecosystem and that of other species. Therefore, if one species is endangered, other species – even the whole habitat – will be affected. We can call these roles eco-services, or as they are termed in this activity, jobs.

Even animals that people often ask, ‘what good are they?’ provide critical eco-services. Insects, for example, are critical to the normal function of an ecosystem. One reason of this is that they far outnumber other animals (and plants) in the number of species and individuals. If just one species or genus should disappear, its loss would affect others and reverberate through its ecosystem.

This activity focuses on insects and only uses some of the jobs that they do. These jobs include:

DECOMPOSER OR RECYCLER: Recyclers help to break down dead plant and animal material and wastes, furthering their decomposition by bacteria and fungi. This material is recycled into nutrients used by living plants.

PREDATORS OR CROWD CONTROLLERS: If there were no animals to control animal and plant populations, they would increase unchecked and overcrowd their habitats, killing off other species. We encounter this event frequently when invading plant and animal’s numbers explode because they lack predators. Predators help keep an ecosystem in balance.

POLLINATORS: Immobile plants need means of getting pollen to other plants of their species so that new seeds and new life can be created. Insects, such as bees and butterflies, are important pollinators.

SOIL AERATORS: Tunneling insects and other invertebrates turn over and aerate soil which helps make it more fertile.

FOOD CHAIN: All animals contribute to the food chain although it is not usually something they choose to do. Some species, particularly heavily populated ones, may be critical links, necessary to the survival of other animals.

What You Will Do:

The purpose of the activity is to make participants aware of the important roles that invertebrates play in Georgia and tropical rainforest ecosystems. It is also important to recognize that there are animals of the same genera or families providing similar eco-services in each of the forests.

What You Need:

- Rainforest poster/bulletin board
- Georgia forest poster/bulletin board
- Laminated invertebrate cards (applicants) with Velcro

What To Do:

Set-up:

1. Display the posters of job postings on wall or on the table where it will be visible to many children.
2. The invertebrate “applicant” cards should be on the table in front of the posters.

Activity:

1. Participants are to read the job postings on the poster/bulletin board. There will be job postings for both the Georgia Forest and the Tropical Rainforest.
2. The participant will then draw a card of invertebrate applicants and read it.
3. The object of the activity is to match the applicant with the correct job. Participants must consider both what the animal can do and where it lives.
4. The participant should stick the card with Velcro onto the poster where they think it matches.

<u>ANSWER KEY</u>			
<i>The names of the invertebrates are arranged on this key in the correct position that they should be arranged on the display boards.</i>			
Tropical Rainforest		Georgia Temperate Forest	
Orb-weaving Spider	Termites	Dung Beetle	Mosquitoes
Morpho Butterfly	Green Cockroach	Dragonflies	Luna Moth
Leaf-cutting Ants	Grasshoppers	Earthworms	Blow Flies