

Who's Who on Garden Earth! Puppet show

Essential Question:

What are some eco-services that support life?

At a Glance:

In this lively puppet show, young learners meet several characters who may live on their school site who work to keep the ecosystem healthy.

Background Information:

The plants and animals at on your school site and in any ecosystem provide a variety of important free services to all the creatures of Earth. These free services are referred to by ecologists as life support functions and include air purification, climate control, food production, pollination, soil production, pest and disease control, water purification and a genetic library. In Garden Earth lessons, we refer to these life support functions as Service Departments. A fantasy character serves as the manager of each Department. The

plant and animal species which help provide these services are the Department workers.

In this puppet show learners are introduced to the Food, Pollination, Air, and Soil Departments.

Procedure:

1. Two people are needed for this activity. One person performs with the puppets and reads the puppet script from behind the stage. The other person, the discussion leader, stands in front of the stage, talks with the puppets and also leads the children through the movements as indicated. The discussion leader may use the outline on the following page to introduce the puppet characters.

2. The discussion leader begins by introducing the concept of the GEN departments. He or she then introduces Foreco. Foreco enters and then the discussion leader and the puppeteer follow the written dialog/puppet script.

Follow-up discussion:

Location: Indoors at puppet stage

Objective: *Learners will*

- discover four Garden Earth Departments and workers through puppetry and kinesthetic activities.

Skills: listening

Supplies:

- Outline for introducing the puppet characters to be used by the discussion leader
- Script for discussion leader (on a clip board)
- Script for *Oli Earthworm's Recipe for Soil* to hang behind the stage
- 2 flowers made out of paper cups and tissue paper, and filled with baby powder

Puppets:

- Foreco
- Old Man Spruce
- Madame Squirrel
- Suga and Bertha Bee
- Oli Earthworm

Subjects: science

Time: 20 minutes



Who are some of the service department workers? What are their jobs?

What do Oli Earthworm and his workers do? What other services does the ecosystem provide?

Who's Who on Garden Earth!
An introduction to the Garden Earth puppet characters
Puppet Script

Discussion leader: Hello boys and girls and teachers. We have a special visitor this morning. Her name is Foreco. I was told that she has a big job that includes taking care of the plants and animals that live on our site.

Foreco: Good morning boys and girls! Good morning *name of discussion leader*. That is right. I have a very big job. It is my job to take care of all of the land on Garden Earth, as well as all of the plants and animals and people that live on the land. This includes taking care of your school site and even your backyards! **And the wonderful services that Earth provides!**

Discussion leader: Wow, Foreco that sounds like hard work. I didn't know that nature provided services. What are they?

Foreco: Nature provides very important services like cleaning the air and water and making great soil that you can grow food in and many other things.

Discussion leader: How do you find enough time to do that much work?

Foreco: Well, I have hired many workers to help me as I take care of Garden Earth. Some of my workers watch over the soil, and some take care of the air; some provide food for all of the animals, and others make sure that all of the flowers are pollinated. I could not do all of my work without all of my fine workers.

Discussion leader: Well thank you, Foreco. Would you children like to meet some of Foreco's workers? Foreco, could you see if your workers could take some time out to talk to the children?

Foreco: Sure I'll get Old man Spruce. I'm sure he would love to talk with the children. *(Foreco goes offstage and spruce comes up)*

Old Man Spruce: Loud snoring sound *(appears on stage asleep and snoring, discussion leader may try to wake him up with a little tug)*

Discussion leader: Children can you help me try to wake up Old Man Spruce? On the count of three, let's all say "good morning, Old Man Spruce". Ready, One, Two, Three, **CHILDREN IN AUDIENCE:** "good morning Old Man Spruce!"

Old Man Spruce (*he has a strong german accent*): What , What! Oh my, vell hello boys and girls. I guess that I must have fallen asleep. My vork is so tiring. But you vouldn't understand because you are not trees. Being a tree is hard vork, all day long ve clean ze air. (*starts to fall back asleep, and is begins to snore*)

Discussion leader: (*Loudly, to wake Old Man Spruce back up.*) Well Old Man Spruce, we could all pretend that we were trees, and then we might understand.

Old Man Spruce: (*Wakes back up*) Vat? Did you say pretend? Oh vell, o.k. Boys and girls, please stand up where you are. Very good. Now in order to clean ze air ve first must have branches and leaves. Put your arms in ze air like they are branches, and your fingers are the leaves. Very good, now svay in the breeze, like this. (*Old Man Spruce swasy back and forth, discussion leader demonstrates for children*). Good, but most trees do not have only two branches. You need more branches to properly clean ze air, so one of your legs will have to do. Very carefully stand on one leg. Very good. Now ze important part: cleaning ze air. First, we breathe in ze air then we breathe it out. Breath in the air and breathe it out, breathe it in and breathe it out, and ve are always svaying in ze breeze. See how hard zat is? Now you hard vorkers, you may sit and rest.

Discussion leader: Wow, that is hard work!

Old Man Spruce: Yes it is very hard, but it is not all zat ve trees do. Ve also provide vood, shade, medicines, paper, and places for animals to live. So you see children it is important to respect the trees. Repeat after me, "respect the trees" (*pause*). Yes, good. Now again, but louder, "respect the trees" (*pause*).

Discussion leader: Old man Spruce, do you and your trees work here at our school site?

Old Man Spruce: Oh yes. I work hard on your school site. There is very dirty air by the car riders' line. The buses spew lots of messes into my nice air. sometime my trees and I have to work hard when the dust from the soccer field flies into the air and messes up my trees' clean leaves. Vell o.k. I must be going, I am getting a little sleepy from all of this hard vork. Bye Bye.

Discussion leader: Thank you Old Man Spruce. Let's see if Madame Squirrel would like to say hello? Madame Squirrel...*(call for Madame Squirrel in a loud voice)*

Madame Squirrel: *(Enters and sets her food basket down on the side of the stage)* Yes, I would love to say hello! Hello boys and girls, welcome to my restaurant! I am so proud of all of the delicious food that my restaurant serves and all of the hard labor that my workers do to prepare it. My restaurant provides food for all animals, and let me tell you, they have **many** different ideas about what makes a good meal. What do you boys and girls like to eat? *(Pause for an answer.)* Well, you have very good taste!

Discussion leader: Madame Squirrel, do you provide food for any of the creatures on our school site?

Madame Squirrel: Oh yes. I serve cockroaches, and grasshoppers, and berries, and flowers, and dead animals, and the list goes on and on, and it's so much work. There are many birds, worms and squirrels and insects and many other creatures who eat on your school site.

Discussion leader: Gee Madame Squirrel, Earth really does provide a lot of wonderful services right here on our school site! Boys and girls would you like to do a little dance that I sometimes do when I am collecting food for the animals? Please stand up and I will show you my dance.

(Discussion leader demonstrates the dance once and then the children can join in.)

Madame Squirrel, Madame Squirrel, shake your bushy tail.
Madame Squirrel, Madame Squirrel, shake your bushy tail.
Wrinkle up your little nose, put it down between your toes,
Madame Squirrel, Madame Squirrel, shake your bushy tail.

Madame Squirrel: Very good boys and girls. Now if you would please sit upon your bushy tails, I must be running. Oh has anyone seen my food basket?

Discussion leader: Wow, she sure is busy! There are a lot of animals on our school site that depend on Madame Squirrel for food. *[List a few animals and ask the children what they might eat.]* Well, there are a few other workers that I would like to introduce to you. Is Suga Magnolia back there?

Suga: Why yes I am, why what a beautiful day, and what gorgeous children!

Discussion leader: Suga, could you tell the children what it is that you do here on our school site?

Suga: Why certainly. Boys and girls, I am in charge of pollination. I know that that is a very big word, and maybe a new one for you. Let's all say it together. Ready? Pol-li-na-tion. Very good. Pollination is very important because with out it there would be no fruit, or berries, or nuts, or seeds, or even baby plants. My fine workers help me with my work. Why here is Bertha Honey Bee now. Bertha can you show the children how you spread pollen from flower to flower?

Bertha: (*puppet acts out process of visiting flowers and carrying pollen from flower to flower while speaking*)

Why sure, Suga. (*Flies to a flower*) I go to the flowers to drink some delicious nectar (*slurp, slurp*), and while I am there I like to rub a little bit of this pollen on my legs and belly (*rubs powder from flower on belly*). Then I go to another flower and do the same thing. When pollen from one flower falls off of my belly onto another flower, that flower can then make seeds, and delicious fruits and nuts. Oh, I love that I can do my work and drink sweet nectar at the same time (*slurp, slurp*).

Suga: Why thank you Bertha. Now children can you pretend that you are a bee? What does a bee say? (*pause*) Now when I ask, "bees, bees what do you say?" I want you to say: *buzz, buzz, buzz*. O.K. Let's try that. Bees, bees what do you say? (*pause*) Oh Bertha, I think that these children would make wonderful bees!

Bertha: I love working hard right here on this school site! Suga, would you like to hear a joke?

Suga: Certainly!

Bertha: What did the flower say to the bee? Hee, hee, it said buzz off!

Suga: (*laughing sweetly*) Oh, Bertha, aren't you clever. Well we must be going now. Bye bye children.

Discussion leader: Well, there is one more worker in Foreco's garden that would like to come and talk with you. His name is Oli earthworm!

Oli: (*pops up*) Hi, Boys and Girls. Things sure are busy down there in my underground basement department. Hey, I have a joke too! Why did the worm cross the playground? To get the other slide! Ha, ha! I'm so funny.

Discussion Leader: Oli can you tell the boys and girls about the work you do?

Oli: My department is nice and dark! I'm really not used to all of these bright lights, since I live in the dark soil, but I guess that I can deal with them for a little while. So boys and girls do you want to hear about the work we do? (*Children – Yes!*)

Oli: We chew on all kinds of delicious dead things and turn them into soil - we say we '**decompose**' things. We put air spaces into the soil so that plants can breathe. We make rich soil from dead trees, animal guts, and rocks. Soil is the birthing material for all life. Soil is very important stuff. There are bugs, leaves, and **poop** to decompose – I gotta go! Bye-bye. (*Oli pops down behind the stage*)

Discussion Leader: Well boys and girls, the creatures that live on our school site sure sound busy. It is time to go outside and see if we can find some of them!

Foreco: *name of discussion leader* before you go outside can I tell the children something? (*Foreco is wearing a linker lens around her neck*)

Discussion Leader: Why sure Foreco.

Foreco: I have a special 'Naturalist' tool to tell the boys and girls about. It is called a 'linker lens'. You hold it up to your eye like this (*she demonstrates*) and you can see beautiful things in my ecosystem that are far away and if you look close to you, you can see things that are close. (*Foreco demonstrates with her linker lens*)

Discussion Leader: Foreco, but why is it called a 'Linker' lens?

Well, often when naturalists look closely at nature, they find that what they are looking at is linked to other things on earth.

Discussion Leader: Thank you Foreco. That sounds great. When we go outside, we will see if we can figure out how things like trees and birds and flowers are linked to other things in nature. Foreco, one last thing - can you tell the boys and girls what a 'naturalist' is? I think it is a new word for some of them.

Foreco: Why certainly, I love that word. I mean someone who loves Earth and really enjoys looking closely at the earth and part so of the earth. A naturalist is someone who is very interested in nature and likes to spend time outside learning all about it. I can tell that these boys and girls will be very good at investigating and caring for Earth.

Discussion Leader: I agree Foreco. These are very smart and caring children. See you later. We are ready to go outside now.