

FUN WITH FUNGI

Field Trip Activities

Grades 4-8

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1. JOIN THE FUNGUS TEAM!

At the gate or along the path the guide can use a rubber stamp and pad to stamp a picture of a mushroom on the backs of the hands of students to show that they are part of the fungus team, and that includes showing respect for these lowly, but mighty important, organisms.

2. COLORS OF THE RAINBOW ON FUNGI

Teams of students will be given margarine tubs with the name of a color written on it and asked to find a fungus of that color, collect a small sample, and share it with the others. The colors most frequently found for fungi are: black, tan, blue, pink, orange, yellow, brown, purple, green, and red.

3. TEXTURE TRANSITION HIKE

As they hike along the trails of the sanctuary, teams of students will be asked to find different textures of fungi. They will be given margarine tubs with a texture written on the bottom and asked to find that type of fungus, collect a small sample and then share it with the others. Textures of fungi at the sanctuary include: slimy, woody, velvety, shaggy, jelly, crisp, shiny, hard, and soft.

4. FUNGUS SCAVENGER HUNT

Teams of students will be given a sheet of search items and some margarine tubs to collect small samples and bring them back to share with the whole group. Look for:

Mushroom with red gills

Mushroom growing on a pine cone

Fungus growing on wood

Fungus growing on the ground

Mushroom with a ring

Mushroom without a ring

Mushroom with decorations on top

Fungus like Jell-O

Hard surface fungus

Fungus that is "o" shaped or a ball

Fungus that is coral shaped with fingers going up or down

Two-way fungus growing in two directions

Slimy fungus

Two different mushrooms, one growing on another

Something eating a mushroom

5. FUNGI HAVE BEEN RECYCLING FOREVER

Half the class of students will be exploring the consequence of fungi going on strike and not recycling and the other half will be taking a look at the end product of fungal recycling.

TEAM 1

Ask the students to divide into three groups. Each group is going to construct a pile of forest litter to a certain depth to show what would happen if fungi did not reduce and decompose the dead plant material in a forest.

Group A - construct a 2-inch pile - fungi on strike for a week.

Group B - construct a 4 inch pile - fungus on strike for a month

Group C - construct a 12 inch pile - fungus on strike for a year.

TEAM 2

Ask the students to divide into five groups. Each group will be asked to find a spot flagged ahead of time by the guide and using a trowel dig a 12-inch hole to see the soil and litter profile. These five spots will be in a variety of locations so as to demonstrate different levels of decomposition. Students will be asked to measure the depth of the sections of the profile (litter, top soil, and sub-soil, and bedrock if present) to compare the different areas and describe what they see in each layer, especially the fungi present.

Students can gather in a circle to talk about the importance of fungi to the life and death of a forest. For helpful background in leading this discussion see the Teacher Background section and the article "The Importance of Fungi in the Ecosystem". This activity can easily be done on the grounds of the school as a post-trip activity also.

6. MYCELIUM SEARCH

The visible mushrooms are just the fruiting bodies of masses of underground fungal structures often seen as white threads in the soil or under the bark of a dead or dying tree. One ounce of forest soil may contain two miles of fungal threads!

Most mycelium is white, but the honey mushroom is often called "honey shoe string" because of the stringy black mycelial strands that often extend up the host's trunk under the bark. Actively growing mycelium may phosphoresce (glow) at night. Inhabitants of sub-arctic regions are said to mark their trails with bits of glowing wood infected by this fungus.

Look on rotten logs, dead or dying trees and in the leaf litter for both the white thread type mycelium and the string like runners of the honey mushroom. What is the longest runner or rhizomorph that you can find? They can extend as far as 130 km. Remember not to strip bark from the trees or tear up a log looking for mycelium.