

Gallery Tour of Cedar Glades

OVERVIEW: Cedar Glade organisms and related items are easily obtained in the Middle Tennessee area. Making these materials available to students will increase interest in the study of this local ecosystem

GRADE LEVEL: 5 – 8

SETTING: Classroom

OBJECTIVES: Students will travel from station to station, recording each item and making predictions about how it may relate to the study of the Cedar Glade ecosystem.

LEARNING STANDARDS CORRELATED: GLE 0607.2.3; 0607.2.4; 0807.5.3; 0807.5.5

MATERIALS:

- Bagworm – found hanging on redcedar trees, collect these in season
- Limestone Rocks – gray rocks very common to Middle Tennessee
- Limestone Rocks with Fossils
- Flower Photographs of Cedar Glade Flowers (without names) – available with this guide or also on Center for Cedar Glade website: www.mtsu.edu/~gladectr
- Cedar Pencil
- Cedar “Tree Cookies” – cross sections of redcedar branches
- Cedar Shavings (available in pet stores for pet bedding material)
- Cedar Berries – not true berries in the botanical sense, but fleshy cones (easy to see fleshy scales, like a pine cone, with a hand magnifier); aromatic
- Cedar Glade Photograph – see Center for Cedar Glade Studies website
- *Echinacea* Capsules Bottle – the Tennessee Coneflower (*Echinacea tennesseensis*) is endemic to glades and is protected by law but other coneflowers have been found to have therapeutic properties and extracts are sold in pharmacies in the herbal medication section
- Mosses on Rocks – mosses are plants that serve as the first pioneers and inhabitants on the rocks of the glades
- Reindeer Lichen – lichen are fungi that have a symbiotic relationship with an algae (fungal body and algae live within); in moist conditions, the lichens are also the first pioneers and inhabitants on the rocks of the glades
- *Nostoc* – dry (this is a cyanobacterium commonly called “Witches Butter” looks like black, burnt paper when dry) – see Center for Cedar Glade website for photograph
- *Nostoc* – wet (dried *Nostoc* hydrates quickly and turns green in water)

PROCEDURE:

1. Distribute items on student tables or stations, so that each location has several samples of the same thing for students to observe.
2. Working in pairs or small groups, students examine objects and make predictions regarding origin, use, role in ecosystem, and how each item might be related.
3. The gallery tour idea can be used as an introduction and a means to encourage student curiosity to many units of study.