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Field Biology
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Trail Talk Outline

Ferns

- I. Introduce self and topic.
 - a. Name
 - b. Know about ferns from “Where the Red Fern Grows”, house plants or large feather plants seen in nature.
 - c. They were first thought to have formed in the Devonian age 417 to 354 mya, along with the first tetrapods and terrestrial arthropods. Their ancient relatives were tree sized and formed huge forests.
 - d. 12,000 species in the world, climbing ferns, aquatic ferns, tree ferns, and filmy ferns.
 - e. They make up 97 % of the living Pteridophytes which are a division of the seedless vascular plants.
- II. Take them to the prairie or woods to point out Ferns
 - a. Ferns have roots, stems and leaves. They are made of the leaf blade or frond, leaflets or pinna, subleaflet or pinnule, lobe or pinnulet, the stalk, rootstalk and roots.
 - b. They are known for their large feather leaves that usually unroll from the tip during growth. This is called the fiddle head, they don’t have flowers.
- III. Habitat
 - a. Ferns can be found in the same habitats where flowering plants flourish, they need a moist environment to reproduce.
 - b. Most ferns are found in tropical areas but there are still many around us. They can be found on rocky banks of a brook, or ravine, forest floor, wet meadows, mountain cliffs, roadsides, and in shaded or open pastures.
 - c. They can survive under a broad range of conditions but it is thought that they were more prominent before the flowering plants began to flourish.
- IV. Cycles
 - a. Ferns go through two types of generations. The Sporophyte and Gametophyte.
 - b. The sporophyte is the dominant generation. This is the stage that we are used to seeing with the actual feather plant. Because they don’t have seeds ferns have sporangia or spore bearing bodies that form on the undersides of these leaves. These get blown to a moist location which is needed for reproduction/ fertilization.
 - c. When the spore lands the Gametophyte stage begins. This then grows into the sporophyte.

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