

## A 'Family Tree' of Living Things:

All plants and animals are basically very similar at the chemical and cellular level, itself indicating a common ancestry for all living things. From the formation of organic chemicals in the primordial atmosphere to the evolution of the simplest single-celled organisms in the sea must have taken billions of years. From these microscopic specks of life the myriads of life-forms which we see today have developed.

The display shows how biologists have sorted out this great diversity by arranging living things in major groupings based on fundamental similarities. It also shows how evolution may have progressed, the simplest organisms being near the base, the most complex being at the extremities of a branching 'tree'.



**FUNGI** These creatures have bodies that are as simple as all the branching forms of life or as complex as some. The plant body is typically a thread. No cell walls are present. The plant body is typically a thread. No cell walls are present. The plant body is typically a thread. No cell walls are present.

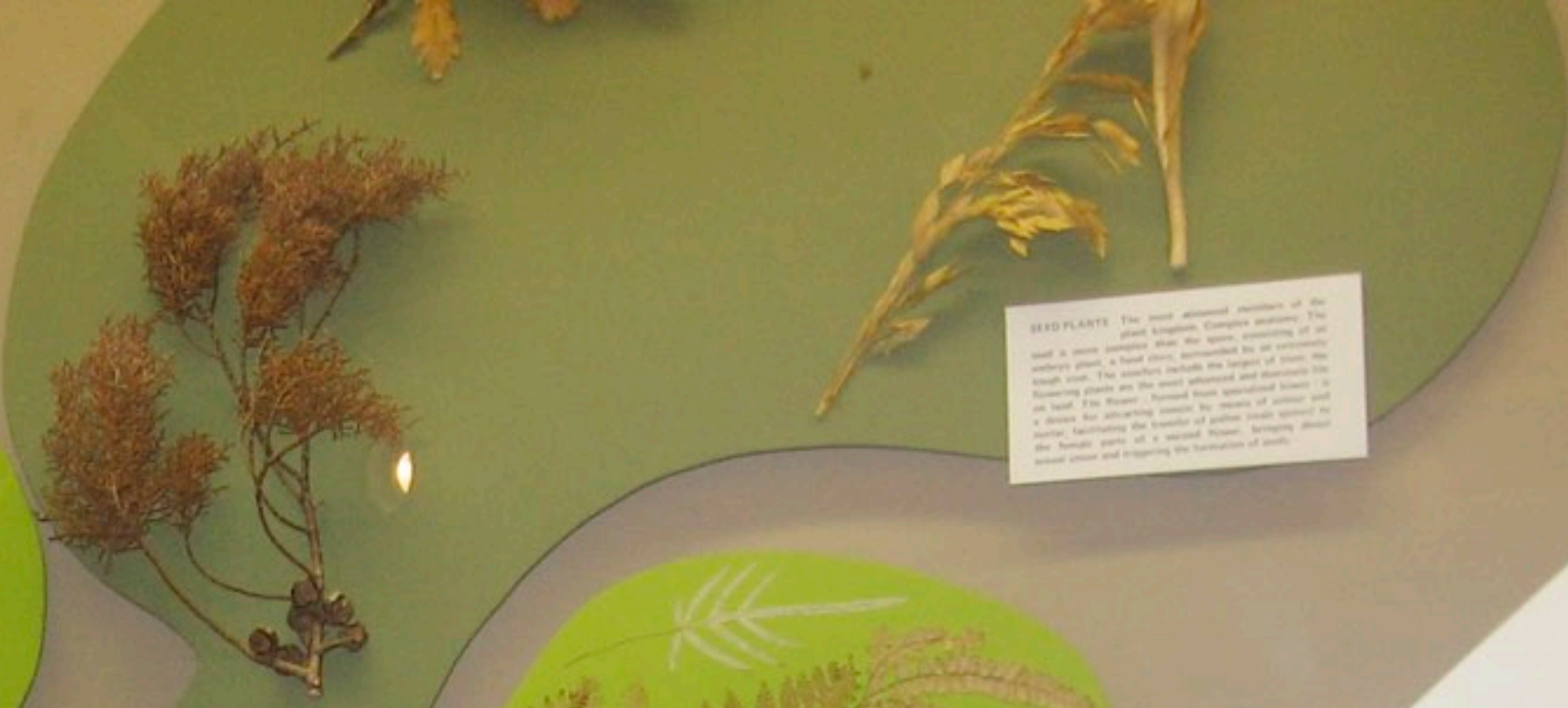
**LICHENS** Lichens are plants consisting of fungi and algae. The alga synthesizes glucose and the fungus provides the structure. Lichens are the only plants that can grow on rocks.



**MOSSES AND LIVERWORTS** These are advanced green algae adapted to life on land. Although most mosses and liverworts are small, some have large, complex structures. Liverworts have a flat, green, leaf-like body. Mosses have a stem with small, green, leaf-like leaves. Liverworts have a flat, green, leaf-like body. Mosses have a stem with small, green, leaf-like leaves.



**ALGAE** Structure is more complex than fungi, but they are the most complex of all. They are the most complex of all. They are the most complex of all. They are the most complex of all.



**SEED PLANTS** The most advanced members of the plant kingdom. Complex structure. The seed is more complex than the sporophyte. The seed is more complex than the sporophyte. The seed is more complex than the sporophyte.



**FERNS** and their allies typically have large fronds of complex structure, especially branched. They are the most advanced and most complex of all. They are the most advanced and most complex of all.

**SPONGES** An animal, except Porifera, are made of cells. Sponges represent a primitive stage in the organization of separate cells into a single, undifferentiated body. They are the most primitive of all animals.

