

Nature Notes

Sphagnum moss



As you enjoy the peace and tranquility of Eimer's Lake you are looking at a pond which has been in transition since the glaciers melted 10,000 years ago. If you walk along the trail to the north end you will find a delicate boggy area covered with Labrador Tea and scattered trees. This area owes its existence to sphagnum moss.

The many species of sphagnum mosses belong to an ancient group of plants called the Bryophytes, a group which both lacks tubes to conduct water and reproduces by releasing simple cells called spores rather than multicellular seeds like most other plants.

Sphagnum mosses have some unique abilities making them a critical species in the lives of many shallow ponds/bogs. Some species can both float on the surface of the water and manufacture acids in their cells. These acids acidify the water making life difficult for bacteria and other decomposers. Layers of dead moss are pushed under the floating layer and are slow to decompose both due to phenolic chemicals within the cell walls and the acidity of the water. This layer of dead moss eventually reaches the bottom of the pond. After hundreds or even thousands of years a delicate spongy hummock is produced where there used to be water. Other plants such as Labrador Tea can then occupy the new ground leading to a succession of plant species including trees such as spruce and pine.

The dead moss layers in a bog are called peat moss. Peat moss has many uses including gardening, insulation, as a medium for growing edible mushrooms, and as an antibiotic filling for wound dressings, but unfortunately, it is a non-renewable resource when used in this way. Research efforts are underway to culture sphagnum moss so industrial operations would be able to grow back the moss they remove.



Floating moss at Eimer's Lake

Please be gentle as you enjoy the bog. It is a living work in progress.

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