

plants and the soil. Some plants flourish best in sandy soil, and are likely to crowd others out of such soil, though these others might be able to grow there, if not in competition with these natives, as they may be called. Other plants grow in water, and cannot possibly live on dry land. Others grow in swamps, others in shady woods, some in sunny places, and some prefer mineral soil. Thus, of trees, evergreens prefer sandy or gravelly soil, while the hardwood trees, oak, maple, beech, need a heavier soil, clay loam. Willow and sycamore grow beside flowing streams, and tamarack in cold, wet soils. The study of these groups of trees may be carried on for several years.

Modern botany places great stress upon the study of the adaptation of plants to environment, which is known as ecology. Plants are found to grow in societies, according to the nature of the soil, moisture and climate. Thus, we have peat bog societies, swamp societies, forest societies, desert societies, fence-corner, and roadside societies.

Four great societies are now recognized: (1) Water plants, i. e., those which grow where water is abundant, (Hydrophytes); (2) Drought plants, i. e., those which grow in extremely dry soil, and in a dry atmosphere, (Xerophytes); (3) Plants that grow where there is a medium water supply, (Mesophytes.); (4) Plants that grow in soil which contains a large amount of mineral matter, (Halophytes).