

LITTLE WALTHAM GARDENING CLUB - February meeting 2025

The subject of the first meeting of the year was SOIL, the very basis of plant husbandry and human life.

Geologists Ian and Ros Mercer gave an excellent and thought provoking presentation about how soil is made and the problems that lay before us concerning its conservation.

Rocks form the basis of all soils. Over millennia rocks are weathered by rain, frost and abrasion to form smaller fragments. At the same time, lichens, (hybrid colonies of algae and fungi), gradually break down the rocks by excreting organic acids thus releasing minerals that can be used by microbes and plants which, when they die and rot, form soil.

The quality of soil is enhanced by microorganisms. One teaspoon of good quality fertile top soil is thought to contain 10,000 different microorganisms (fungi, bacteria and protozoa) and these, together with soil invertebrates make the soil nutrients available to crops. Our job as gardeners is to increase the fertility the soil by the addition of organic matter in the form of garden compost and, if available, animal dung. There is a greater incentive to make one's own compost from plant matter now there is a charge to be levied on the council brown bins .

Land use is now becoming an increasingly controversial problem. With increased demand for construction of all sorts and solar panel arrays over our countryside, the availability of quality soil for food production is diminishing. Together with soil pollution and the effects of climate change we are looking at a vanishing fragile resource which took millennia to make - how can we stop that happening?

Ros and Ian, being long time leaders of the Essex Rock and Mineral Society, have studied the soil in our county and produced excellent charts listing the amazing variety of pebbles (many brought from Cornwall and Wales by the wide, ancient River Thames), and also fossils.

A very interesting and thought provoking evening was enjoyed by all.