

# THE ROLE OF TREES IN CONSERVATION

The following article appeared in the Tree Society's Annual Report, September/November, 1971.

"There is a growing sense of the urgency of the task facing all countries who are trying to design effective conservation measures to combat the threat of disaster to civilisation by pollution.

The problems ahead are very large and complex. Much work and research will be needed to identify and measure the multitude of factors affecting almost every walk of life if we are to see clearly and keep a sense of proportion.

One problem that is sure to be involved in many a plan is the question of how far and how much trees play a part in preserving the environment. Few will deny that they do have an important role in town and country, but how important are they, beyond their beauty and shade, and helping to stop erosion? Can trees help to stop air pollution? Certainly; trees absorb the carbon dioxide that we and animals breathe out as poison to us, and discharge pure oxygen to the atmosphere for us. They retain the carbon to rebuild their own protoplasm with the aid of sunlight. This is not a negligible function. Clean country air contains only 0.03% of CO<sub>2</sub>, while the air exhaled by humans contains 14-16%—city air has 0.04%.

If there are enough trees together—about 20,000 acres will do—they can favourably affect the local climate. They absorb water through their roots—use some and transpire some to the air in sufficient amount to supersaturate the clouds which then send it back again as rain. It is estimated that for every hundred units a tree uses it gets an extra 150 (units = gallons or tons) which it leaves in the ground to moisten it and provide for grass to feed beast and bird.

If we want to keep our bird life we must look after the trees, then the birds will look after themselves and stay with us.

If we want to keep our farmland we must persuade men not to over-clear natural bush, which alters the water table and causes salt formation, which leads to desert conditions. They should use trees to stop this, have smaller fields, better windbreaks, and more productive land.

It has been estimated that there are over 5,000 uses for the wood we get from trees—indeed it is difficult to picture any form of human life on this planet without the constant help of wood. All these uses follow the death of the parent trees, but how much more value should be placed on live trees. We tend to take them for granted, whereas their real worth is beyond price, alive and dead. We owe it to our descendants to make sure that trees are properly used and not abused, and are given prominent place in all conservation plans in future. We neglect this at our peril."