TREES are REGULATORS of the ENVIRONMENT

What is a tree worth? You can get many answers, most of which have some merit. One inescapable fact is that they are essential to life on our planet.

They moderate temperature and affect pollution (sometimes pollution affects trees), noise, wind and water.

As trees grow they provide a home for wildlife and products for our daily living. In old age (sometimes earlier) they are cut and in their place is space for a new tree to grow.

The daily evaporation from a single well-watered tree can produce an estimated cooling effect of more than a million BTUs. This is equal to 10 room-sized air conditioners operating 20 hours a day.

Because of the "greenhouse" effect of waste particles in polluted air the air temperature may be 11°C. higher in urban settings than it is in nearby rural areas. *This can be an important reason for having green space in cities.*

Trees absorb polluted air and emit air richer in oxygen and somewhat freer of pollutants. A growth of one ton of wood releases at least 1·1 tons of oxygen and absorbs at least 1·5 tons of carbon dioxide according to figures released in the United States.

Fossil fuels

It has been recognised that our oxygen reserve is being reduced by burning fossil fuels. Removal of big areas of plants—for people—is reducing the oxygen supply. It is thought that three-quarters of the conversion of carbon dioxide back to oxygen takes place in the ocean, but trees play an important part on the land. Obviously both sources of oxygen supply are worthy of protection.

Forests and rows of clumps of trees dampen city noise. Each 100 ft. of forest is now believed capable of dissipating about six to eight decibels of sound.

This can be put in perspective by realising that a human ear has the ability to detect one decibel, ordinary speech is at about 60 decibels, and the range of audibility is considered to be about 130 decibels.

Windbreaks

A windbreak provides full protection to an area 10 times its height and some protection for 20 times its height downwind. A five-row windbreak 35 ft. high will reduce a 35 m.p.h. wind in the lee 100 ft. The wind will have built up to only 15 m.p.h. in the lee 200 ft.

Fuel use in the home can be reduced 20 to 30 per cent by properly located windbreaks. Livestock, under U.S. conditions gain weight faster and require less feed where protected by a windbreak; and calving and lambing is better.

Wildlife living space and cover are provided by trees. Forest type, productivity, growth rate, trees per acre, age and size, extent of acreage, availability of water and other factors influence the value of various foods that the trees may provide.