Local Government reform

On November 1, 1989 the number of local authorities and special purpose boards in New Zealand decreased from about 600 to 13 regional councils, 73 district councils and one unitary authority. The functions of the previous special authorities in the areas of pest destruction, drainage, water and soil conservation and noxious plants control will be carried out by the new regional or district councils. (Environment Update, Ministry for the Environment)

Mountain Lands Committee

The New Zealand Mountain Lands Committee has recently been formed as a sub-committee of the Lincoln College Council. Dr Andrew Pearce of FRI, Ilam, was one of the Institute's nominations and has been accepted for the Committee which is to be chaired by the Hon. Sir Clinton Roper.

The Mountain Lands Committee will provide advice to the Minister for the Environment on matters affecting the use and well-being of the mountain lands.

Paper mountains

A consulting engineer, John O'Grady, is reported in "Environment Update" (Ministry for the Environment) as noting that the national average amount of "rubbish" produced per person has increased from 0.7 to 0.73 tonnes per person per annum in the period from 1982 to 1987. In Wellington, however, the increase has been from 1.29 to 2.0 tonnes per person per annum!

LETTERS

Soil fertility in the tropics

Sir,

John Halkett's article on tropical forests, in the August issue of NZ Forestry, provided a timely reminder of their continuing inexcusable devastation. However, one aspect of his otherwise excellent article requires comment. It concerns the claim that "the underlying soils of tropical forests are incredibly poor". This is a commonly expressed view, in both popular articles and in some scientific literature. However, it is a generalisation, and, like many generalisations, is not very accurate.

Some tropical forests do grow in extremely poor soils, where a very high proportion of the available nutrients are tied up in the vegetation or are cycling within the biogeochemical cycle. In these situations, as Mr Halkett points out, disruption of the cycle can rapidly lead to ecosystem deterioration and worthless wastelands. Tropical forests also grow in fertile alluvial soils and on young soils from volcanic ash, in regions such as Papua New Guinea, Central Africa and parts of South-East Asia and Central America .

The Amazon basin, about which much current concern is being expressed, contains a wide and complex variety of landforms and associated soils, ranging from fertile alluvial and padi-type soils to extremely infertile ultisols. Thus the common claim of highly infertile soils across the whole region is not correct. Of course, the other points of concern in Mr Halkett's article are very important and should encourage us all to lend our support to a more sensible approach to the conservation of these forests.

John Adams
Senior Lecturer in Soil Science
Lincoln College

Tropical forests

Sir,

Reading the article on tropical forests I noted that there was little emphasis on the subject of replanting trees on a vast scale. There was a lot about preserving the tropical forests.

When discussing the 'Greenhouse Effect' metereologists can show graphs illustrating the progressive increase in world temperature; which they assert can be attributed to the effects of the industrial revolution. However the trends are far older than that, and go back to the dawn of agriculture.

Since that time to assist mankind's struggle to grow food each year forests have been ruthlessly cut out and burned! To this day a major component contributing to the 'Greenhouse Effect' is carbon dioxide, much of which could be absorbed if there were more forests to do this.

In rough terms, every man, woman, and child alive requires not only about one tonne of food each year, but also uses about one tonne of wood and wood products. In rich countries much of the wood product takes the form of paper and populations have access to and can pay for fuel alternatives of coal, electricity, and petrochemicals. The use of sawn wood for building and furniture lies between 0.03 cubic metres per capita per year in poor countries, and about 0.4 cubic metres per capita per year in wood rich countries. For the majority of mankind living in poor countries the green weight of fuelwood exceeds the demands for paper in rich countries. It is not easy to cook one kilo of food using less than one kilo of dry wood. Who wants to eat raw potatoes, kumara, rice, or other grains?

Some four billion people in the world will cook their food every day using wood fuel for the foreseeable future. At, say, two hundred tonnes of green wood per hectare one can work out how much area of forest will need to be replaced by planting each year! Some 10 million hectares of fuelwood plantations must be replaced each year if we are to survive; on top of any conservation of rainforests that occurs!

K.D. Marten
Taupo