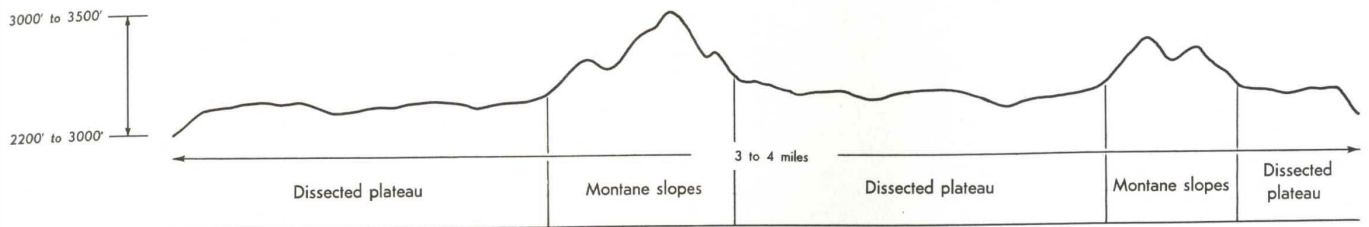


KOETONG LAND SYSTEM

KOETONG LAND SYSTEM

Area: 82 square miles 2.1% of catchment

(a) Distribution of land forms



(b) Land system diagram

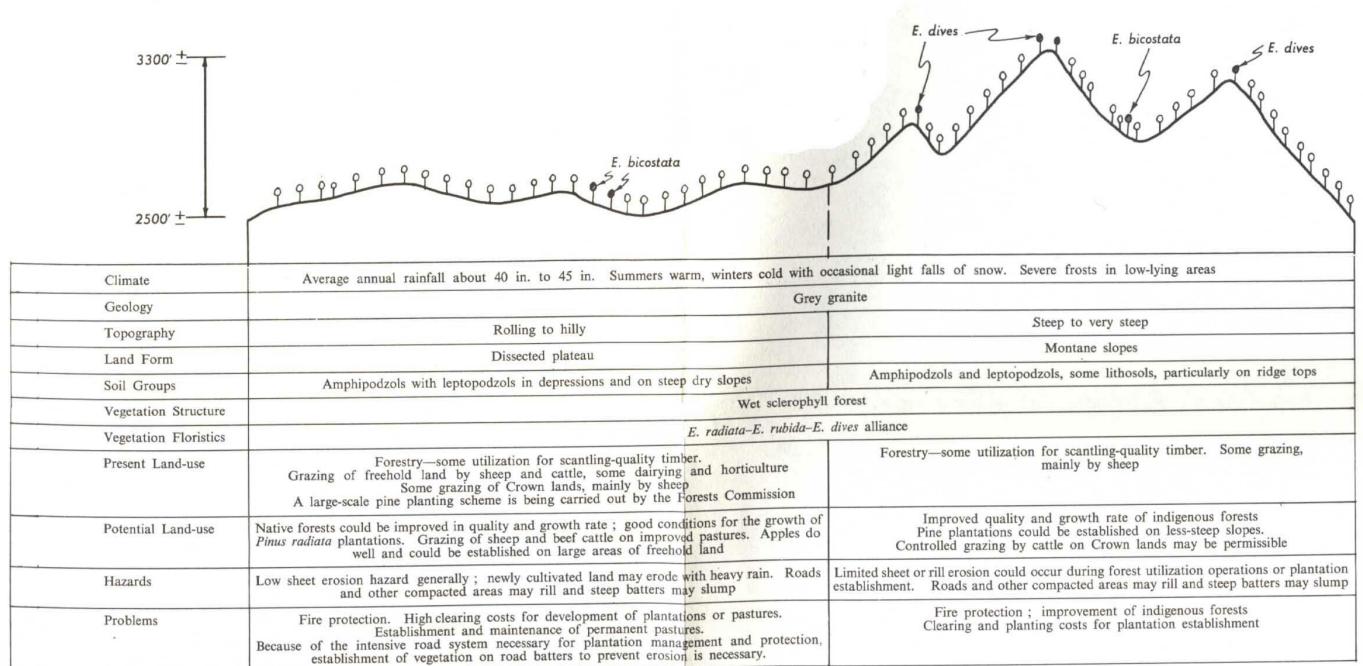


Fig. 24 – Koetong Land System

The Koetong land system is located in the central-north of the catchment and consists of the dissected plateau country around Koetong and Shelley. It extends from south of Mt. Lawson in the north, to Mt. Cudgewa in the south. Koetong Creek originates in the land system and flows for a great deal of its length through it. Other important streams having their source in the land system are Dry Forest, Mountain and Pheasant Creeks. The area is traversed from west to east by the Wodonga-Cudgewa railway line and the Tallangatta-Corryong road.

The area of the land system is 82 square miles which is about 2 per cent of the total catchment. About 70 per cent of the area is Crown land and the remainder is freehold. A large area of Crown land is at present held under a Permissive Occupancy by the Forests Commission whilst awaiting dedication as Permanent Forest. The Commission has also purchased some large freehold areas for the extension of its pine plantations in the area.

The plateau land form makes up about 80 per cent. of the land system. It is somewhat dissected by the streams which traverse it, and has a rolling to hilly topography. Montane slopes above the plateau make up the remainder of the area (Figure 24). These may have been peaks on the land-surface prior to the Kosciusko uplift. They are rarely more than a few hundred feet above the plateau surface which is generally at about 2,200 feet to 3,000 feet elevation. The area is part of the grey granite massif which is referred to as the "Koetong granite". Small areas of Recent alluvium have been deposited along parts of the streams, but they are not of significant size for this scale of survey.

Average annual rainfall over the area is about 40 inches to 45 inches. There is a definite winter incidence in the rainfall pattern, and light snow may fall several times during the winter. Frosts are common and often severe, particularly in low-lying areas. Temperatures in summer are generally milder than in the adjacent valleys and winter temperatures are colder.

Amphipodzol soils occur over most of the plateau. On steeper slopes, and on the areas which would receive detritus from the steeper areas, leptopodzols are common. Out-crops of granite boulders commonly occur on the tops of low ridges and hills. Granite floaters occur in the soil in many places, and decomposing rock is encountered at shallower depths on bills and ridges than elsewhere. Soil depth is usually about 4 feet to 5 feet, but is over 6 feet in some areas.

Wet sclerophyll forest of the *E. radiata*-*E. rubida*-*E. dives* alliance occurs throughout the land system, except bordering perennial streams and in low-lying swampy areas, where *E. camphora* and sometimes *E. stellulata* occur with wet tussock grassland of *Poa australis*. The *E. dives* component of the forest vegetation is more dominant on stony ridges and hill tops and in exposed situations. The ground flora of this vegetation is a fairly continuous sward of *Poa australis* with scattered shrubs, mainly *Platylobium formosum*. Sometimes bracken fern (*Pteridium esculentum*), forms a continuous ground cover.

There is very little evidence of erosion in this land system. The main causes for concern are the roads, where surface washing and stumping of batters can be troublesome. The amphipodzols have a moderately good permeability, but the leptopodzols will erode if they are misused. Sheet and rill erosion may occur if finely-cultivated soils on sloping land are subjected to heavy rain.

The greater part of the land system is Crown land which has been used primarily for supplying local sawmills with scantling-quality mill-logs. There is some licensed grazing of both sheep and beef cattle. The value of the present timber crop over much of the land system is not very high. It should be possible to raise the quality and quantity of indigenous hardwood timber available from this area, by more intensive management. The Forests Commission has recently initiated an extensive programme of *P. radiata* plantation establishment in the Shelley area. The freehold land other than that bought by the Commission, is at present used mainly for grazing. Sheep for both wool and meat, and beef cattle do well. The growing season for pastures usually extends well into the summer. In some more favoured summers, pastures may not dry off, but frosts in spring and autumn, and cold weather generally over the winter, reduce the beneficial influence of the better soil-moisture availability in these parts.

A small apple orchard, and small strawberry and vegetable gardens have done well in the Shelley area, and it would seem that the environment is well suited to these forms of land-use. When choosing sites for orchards or gardens, frosty areas should be avoided.

The remoteness of this area from markets or conversion centres for produce, is one of the main factors operating against its development. However, the Wodonga-Cudgewa railway with stations at Koetong and Shelley, passes through it. Many landholders operate their farms on a part-time basis whilst working on the railway or with road gangs or for sawmillers operating in this area. The establishment of pine plantations in the area should give some stability to the population.

Protection of the area from fire, always a most important task, will be increased when pine plantations have been established.

Because of the dense network of roads associated with plantation establishment, road construction must be carefully planned, and rapid revegetation of bare batters, particularly fill batters, is necessary.