

A.6 Land Use

Historical background

Prior to European settlement, tribes of Aboriginal hunters and gatherers sparsely populated the study area. The first reported Europeans included a party led by Major Sit Thomas Mitchell. Mitchell crossed the Murray from New South Wales in June 1836, and en route to Portland passed close to the present sites of St. Arnaud and Wedderburn. On his return journey through the Talbot, Newstead and Castlemaine areas, he named the Loddon River after a stream in England.

Following Major Mitchell's favourable report, squatters moved in and by 1840 had occupied a large proportion of the study area. When the gold rush began in 1851, many workers left the pastoral areas to chase the fortunes of the goldfield. The squatters could not supply the food requirements of the increasing mining population, and many farmers diversified into horticultural crops, dairying, etc, particularly where the better soils occurred along the streams.

After the initial fervour of the gold rush had waned and easily won surface deposits had dwindled, many of the gold-miners sought to become land-owners. The government offered extensive areas of land for selection by in many cases the holdings were too small and the country they occupied too poor to be economically viable.

Over-clearing of the land for firewood and mine timbers followed by over-cultivation and overgrazing of areas not suitable for intensive agriculture caused widespread soil deterioration. The uncontrolled spread of rabbits during the late 1800s aggravated this situation.

Agriculture is now well established in most of the catchment; however, relict mullock heaps, mine shafts, pits and ruins can still be found, serving as memorials to the determination and perseverance of the early Australian fortune-seekers.



Multiple land use at Mount Franklin near Daylesford – softwood plantations on the slopes, a fire tower on the ridge and a popular picnic area in the central crater.

Present forms of land use

Forestry

Native hardwoods

Timber-harvesting for general-purpose construction timbers occurs in the higher-rainfall Wombat State Forest in the south. Commonly extracted species include messmate stringybark as well as the less favoured species, narrow-leaf peppermint, manna gum and candlebark. The native forests in the drier northern areas are generally of poorer quality and are cut for limited quantities of sleepers, posts and firewood. The demand for firewood is increasing, especially near population centres, although the ability of the forests to meet these needs is diminishing.

Eucalyptus-leaf harvesting of mallee scrub for oil production occurs between Inglewood and Wedderburn and in the Whipstick north of Bendigo. The preferred species is blue mallee.

Exotic hardwoods

A small plantation of oak trees (*Quercus* spp) grows on the western slopes of Mount Alexander, but has little commercial value.

Exotic softwoods

Radiata pine is the only commercial softwood species extensively planted in the area. Small plantations grow on the slopes of Mount Franklin, Mount Alexander and near Mount Beckworth, and

larger areas near Daylesford, Creswick and Castlemaine. These softwood plantations supply thinnings for pulpwood and sawn timber for a variety of purposes.

Agriculture

The general trend in agriculture is from grazing in the south to cropping in the north. Superimposed on this general trend is cropping on the red volcanic soils in the south, and grazing of irrigated pastures in the north. The main grazing enterprises involve sheep-raising for wool or fat lamb production, whereas cereal-cropping, usually of wheat, oats or barely, is the main cropping enterprise.

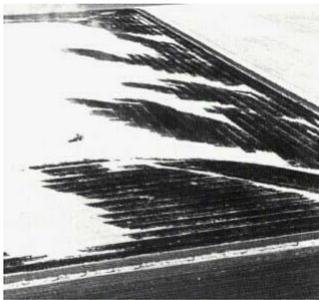
Grazing

Sheep

Wool production, usually from Merino sheep, commonly occurs on pastures, often native, throughout the drier parts of the catchment. The production of fat lambs from crossbred ewes mated with British breed short-wool rams is common on improved pastures in the south of the catchment and on irrigated pastures in the north.

Beef cattle

Graziers raise beef cattle for beef and veal production throughout the catchment, although generally at much lower levels than the sheep enterprises. Beef cattle predominate on small areas of irrigated pastures in the north.



Stubble burning – the burning of the previous year's stubble prior to cultivation – is a widespread practice in the northern cropping areas

Dairy cattle

Dairying is restricted to small areas of irrigated pastures in the north and to small areas on basaltic soils in the higher-rainfall southern areas.

Cropping

Cropping is most common on the gentle slopes and plains in the northern half of the study area, where wheat is the dominant crop. Oats and barely are grown in most areas, with a variety of other crops – including rape, peas and lupins – in rotation with the cereals. Lucerne is frequently grown as a fodder crop and/or pasture, and compressed bailed lucerne is exported in small quantities to overseas markets.

The well-structured and well-drained red basaltic soils in the south occasionally support propagation of flower bulbs such as daffodils.

Irrigated agriculture

Irrigation water available from the Goulburn system via the Waranga Western Main Channel has enabled irrigated pastures and crops to be grown in the north. In some instances these pastures support dairy cattle. Near Castlemaine, water from the Coliban system (in the Campaspe catchment) largely complements domestic and stock supplies; however, some is used to irrigate improved pastures or fodder crops. The Coliban system also supports an apple-growing industry on granitic soils near Harcourt.

Potatoes are irrigated on the well-drained red basaltic soils to the east and west of Creswick.



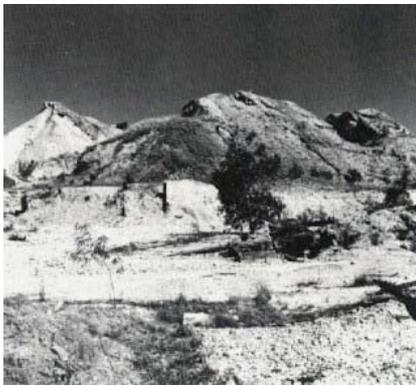
Irrigated apple orchards around Harcourt.

Mining

Gold mining, once so prevalent, had almost ceased, although gold miners have shown a tendency to re-open in response to improved gold prices and technology. The last major mine to close was the Wattle Gully gold mine at Chewton in 1976, but this has recently re-opened. Numerous small claims are presently worked throughout the catchment, most notably in the triangle made by Bendigo, Ballarat and St. Arnaud, and a few larger companies are now conducting investigative work in this area. Prospecting with metal detectors is a common leisure activity.

Sand and gravel suitable for road or other construction activities are obtained from a number of sources, including the mullock heaps of the early gold-mines, the lower slopes of the granitic areas such as Mount Korong, Mount Kooyoora and Mount Beckworth, from Tertiary gravel deposits throughout and occasionally from prior stream sands in the north.

Hardrock quarrying to obtain crushed rock for road construction occurs in basalt at Carisbrook near Maryborough, and in granite in the Harcourt-Mount Alexander area. The granite near Harcourt and sedimentary rocks near Castlemaine also provide material suitable for buildings or monuments.



The large mullock heaps near Bet Bet remain as testament to past gold-mining endeavours.

Nature conservation

The bulk of the study area has been cleared for agriculture; however, substantial tracts of native forest still remain on both granitic and sedimentary rocks. Some of the areas- for examples, Mount Kooyoora in the north-west, Mount Alexander in the east and the Whipstick north of Bendigo- have been reserved although most are State Forest, which provide for timber production as well as recreation and conversational endeavours.

Recreation

The State forests, parks and other reserves provide abundant opportunities for recreational activities, which include picnicking, sight-seeing, bushwalking, fossicking, hunting, horse-riding, trail-bike riding and orienteering. The forest around Mount Kooyoora was the site for the 1985 World Orienteering Championships.

The rivers and reservoirs also provide for water-based recreation such as fishing, sailing, swimming and power-boating.

The mineral springs and bushland of the Daylesford-Hepburn Springs and Vaughan Springs areas are popular tourist destinations.

Residential use

The cities of Maryborough and Castlemaine, and the major towns of Creswick, Daylesford and Wedderburn, lie within the area. Similar towns include Dunolly, Bridgewater, Inglewood, Maldon, Talbot and Clunes. Rural subdivision, especially in areas near to the larger population centres, is becoming more common and is placing pressures on the more traditional land uses such as grazing or cropping. Attendant problems include erosion due to increased roading and construction, and the disposal of septic effluent.



The township of Clunes nestles in the valley of Creswick Creek.

Water supply

Major water storages in the study area are Cairn Curran, Laanecoorie and Tullaroop. These storages supply irrigation waters and, in the case of Cairn Curran, limited hydroelectric power. The Coliban water storages system from the adjacent Campaspe River catchment supplies domestic, stock and irrigation water by gravitational feed along channels and ditches to the Castlemaine area. Many towns obtain water directly from small reservoirs on the larger streams and rivers. The Western Waranga Main Channel, filled by water from the Goulburn River, supplies irrigation and domestic water to the northern areas.