



BIBBULMUN Bushwalking Track

*Adapted from information supplied by
ROSS GOBBY*

The Bibbulmun track is a marked bushwalking track from Kalamunda to Albany, through the forest along the Darling Scarp and the beautiful and sometimes rugged south coast.

The approximately 500 km first part of the track, from Kalamunda to Northcliffe had limited use last summer and autumn, although modifications to the route were still to be made before it could be published and officially opened. The modifications were necessary to provide greater protection against the spread of the fungal disease *Phytophthora*

cinnamomi. Selection and marking of the section from Northcliffe to Albany is in progress and will be opened at a later stage.

The route has been selected to pass through a variety of countryside and takes in some of the best scenery in the South-West. For much of its length the track follows seldom used forest tracks, but the route passes through bush for short distances. As better routes are discovered, some sections may be further modified.

▲ *Front cover photograph of the proposed Bibbulmun track guide book. The book will contain a complete set of 30 maps covering the entire 500 km Kalamunda to Northcliffe section of the track when it is completed, plus a sheet index map, two additional simple sketch maps in the introductory section, and descriptive notes for the respective stages along the track.*

The price for the 96-page guide book will be \$1.

Additional circuit routes similar to the ones near Collie and Pemberton may also be added at a later date.

The Bibbulmun track is named after aboriginal inhabitants of the area through which it passes. Jesse

This sheet map from the guide book shows the route and the area covered by individual maps in the book. ►



INDEX TO 1 : 100 000 MAP SHEETS

SCALE
0 10 20 30 40 50 Kilometres

Hammond, in his book *Winjan's People*, refers to the aboriginal group which occupied the area to the southwest of the dotted line shown in Hammond's map (page 15). The map is taken from the Bibbulmun track guide book, which contains additional general information of interest to users of the track, 32 maps prepared by the Forests Department Drafting Branch, and descriptions of the various sections along the track from Kalamunda to Northcliffe.

The Bibbulmun track traverses an area of fascinating geological and biological interest and many points of interest are noted in the description accompanying each map page in the guide book.

Geology

From Kalamunda to just north of Manjimup the track follows inland of the western edge of the ancient Western Australian plateau. This large plateau, which makes up most of the southern half of the State, has been lifted to a height of 300 to 500 m by geological forces acting over millions of years, and now forms the Darling Scarp along the western edge. The plateau surface is a gently undulating plain—levelled by millions of years of erosion before being uplifted. Rivers and streams running over the scarp have cut steep-sided valleys. With the exception of a few large rivers such as the Murray and Blackwood, these valleys do not extend far inland.

The ridges, which are part of the ancient plateau surface, are brown ironstone, or laterite, which yields bauxite ore, and is also the growing medium for forest trees in the region. The laterite was formed over millions of years by chemical breakdown of underlying granite in climatic conditions in which the iron and aluminium minerals were retained. Its depth varies, but is rarely greater than 6 m. Below the laterite is a zone of decomposing granite clays above undecomposed granite.

The shallow valleys of the old surface are broad and flat with sandy soils. Near the scarp young fertile soils, derived from the underlying granite and basic rocks, have formed on the valley floors and slopes. Because of this, steep valleys have frequently been cleared for agriculture.

Throughout the area there are numerous outcrops of granite and basic rocks—some of the more resistant of which remain as hills such as Mts. Dale and Solus.

Vegetation

The south-western corner of the State has developed as a forested island for a long time, separated from the rest of the continent by the surrounding deserts. Slow genetic changes have taken place and unique species and complex plant communities have evolved that are adapted to the unusual soil types, harsh climate and ever-present factor of fire.

Along the scarp the track passes through the famous jarrah (*Eucalyptus marginata*) forest. Jarrah is usually associated with marri (*E. calophylla*) and is particularly well adapted to growing on the laterite ridges, although it is also found on sands and the fertile valley soils. A number of common understorey species are found in this forest: bull banksia (*Banksia grandis*), sheoak (*Casuarina fraseriana*), blackboy (*Xanthorrhoea preisii*), and zamia palm (*Macrozamia reidleyi*) to name a few. Countless species of wildflowers abound in the spring, while a few provide almost year-round flowers.

Along the water courses and creek flats are W.A. blackbutt (*E. patens*), flooded gum (*E. rudis*), white-barked bullich (*E. megacarpa*) and paperbarks (*Melaleuca*). In the more easterly country the white-barked wandoo (*E. wandoo*) will be encountered.

This plant community has developed in association with frequent fires. Many species, for example the banksias, grevilleas and hakeas, have

woody "nuts" which normally require fire to open and release seed. Both jarrah and karri germinate best in the ashbed left on the forest floor after a fire. Jarrah (and some other species) grows a carrot-like root known as a lignotuber before it develops as a vigorous sapling. This adaptation ensures that the plant develops an extensive root system which is virtually indestructible by fire and which can supply the water necessary when the tree begins to grow vigorously. The seed of most wildflower species will germinate only after a fire and as most of these plants are relatively short-lived, fire is essential to a continuous wildflower display.

Although remarkably resistant to the effects of fire and summer drought, most of the plants in this community are highly susceptible to the effects of a disease known as "jarrah dieback", which causes the decline and death not only of jarrah, but several hundred other plant species. The disease is due to a tiny soil-borne fungus called *Phytophthora cinnamomi* which attacks fine feeder roots of susceptible species. The disease spreads by the transport of spores in infected soil. Apart from restricting the movement of mud or soil-covered vehicles from infected to healthy forest to prevent widespread distribution of spores, no means of economically controlling the disease is yet known.

The Bibbulmun track passes many disease affected sites which have been planted with pines or resistant eucalypts. Areas affected by jarrah dieback can be detected by the presence of dead or dying jarrah trees, dying banksias and zamia palms and in severely affected areas, by the open nature of the forest.

From Manjimup southwards where the summers are milder, the track enters the majestic, white-barked karri (*E. diversicolor*) forest in the valleys of the main rivers and streams. On these moist, better quality sites there is often a luxuriant

tangle of undergrowth, commonly of the soft-leaved hazel (*Trimalium*), netic (*Bossiaea*) and *Acacia urophylla*. Trailing vines, such as clematis, are common and there are many fascinating orchids, mosses, ferns and fungi on the forest floor.

Forests are not static, but grow from youth to maturity like all living things, and must regenerate. In some areas the forest is young and the trees compete vigorously as they grow to become forest giants. In the mature forest the massive, slower growing trees suppress the young growth until they eventually make way, through fire or logging, for another generation.

By understanding the ecology of the forests we can manage them wisely and work in harmony with nature to promote a healthy plant community and at the same time provide a permanent supply of raw material for our future needs.

Animals and birds

Although the south-west region of the State has the richest fauna population, it also is the most densely settled area and as a result the natural habitat of many animal and bird species has been destroyed by clearing for agriculture. The preservation of fauna habitats is more important in conservation than simply protecting individuals from killing. Fortunately, State Forests, through which the Bibbulmun track passes, constitute the largest area of undeveloped land in the South-West and has an unusually rich animal and bird population. One-third of the mammals known to occur in the State are found in these forests, which occupy only 0.72 per cent of the State's area.


Most of the native animals are shy and nocturnal, and so are rarely seen, making the forest seem deceptively deserted. The best way to see them is with a powerful spotlight at night,

when they are active, to pick up the light of their eyes and then use binoculars to observe them closely. Kangaroos, wallabies and many other animals are particularly active at sundown and rest in dense scrub during the heat of the day.

The wandoo forest is particularly rich in fauna, especially possums, numbats and tammars. Swamps in the jarrah forest are the habitat of quokkas, mardos and other small marsupials. In the karri forest the southern bush rat, the small mouse-like common dunnart, and where perennial water occurs, the water rat may be found. Throughout the whole forest area kangaroos and wallabies are extremely common and the occasional emu may also be seen.

Most larger native animals are herbivores, but the smaller marsupials are frequently carnivores and live on large quantities of grubs and insects. They are generally frugal users of water—obtaining much of their requirements from the vegetation and resting during the heat of the day. Many have fascinating habits. The pigmy possum, which lives on insects and nectar, and often hides in blackboys, under bark or in tree holes, can lower its body temperature and go into a sort of hibernation to conserve its resources when times are hard.

The jarrah and karri forests also have rich bird populations—there are over 80 different species in the Dwellingup area alone. Each species has its habitat requirements. Quails and warblers, for example, require dense undergrowth, while parrots and cockatoos require holes in trees.

To those interested in nature study and the freedom of the outdoors, the Bibbulmun bushwalking track, with its variety of stages, will provide both challenge and relaxation. 



◀ A sketch map by Jesse Hammond, showing the area of habitation of the Bibbulmun tribe south-west of the broken line.