

Soils of Bass Coast Region

Fact Sheet series for the
Small Rural Landholder

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What soil do I have on my property?

Managing soil is a complex issue.

There are many questions landholders can ask to help determine key properties. For example:

Do I have a sandy soil with good drainage but poor fertility, or do I have a red to brown volcanic loam soil that appears to be more fertile? Perhaps I have a gravelly granitic clay soil.

This fact sheet explores the major soil types across the Bass Coast region and discusses their properties in terms of what enterprises they might best support.

All rural landowners should be aware of their soil types and how best to manage them. Given that the earth's topsoil ranges from 1cm or less to 40cm, landowners have a responsibility to ensure that this precious resource is protected and well managed.



Soils are derived from rocks

Cambrian greenstones (600 million years) are the oldest rocks in the Bass Coast region outcropping on Phillip Island. Silurian sandstones and mudstones (430 million years), and Devonian granite (400million years) are also seen here along with Tertiary basalts, which cover most of the island and part of French Island.

Cretaceous sediments deposited (~ 135million years ago) occupy the majority of the Bass Coast mainland area.

In the late Jurassic and early Cretaceous periods (96-160 million years ago), sediments were deposited into a basin, along with swamp material. Once compacted, this formed coal seams in the Wonthaggi area.

Extensive faulting resulted in the formation of Port Phillip and Western Port Bays.

Rocks weather to soils

Through the agency of weathering, chemical, physical and biological elements combine to render ancient rocks into finer particles that together with organic materials, over time form the basis of the soils and soil profiles that we see today.



The Landscape

Bass Coast has environmental and landscape values of regional and national significance. These include Ramsar listed wetlands, marine parks and remnant native vegetation covering 864 square kilometres.

This environment contains fragmented natural landscapes with large patches of remnant native vegetation that has significant biodiversity values.

It has 180 kilometres of coastline, wilderness areas and productive farmland on a range of topographical landscapes.

Land classing

Land classing ranks land on its suitability for agricultural and horticultural production and identifies land more suited to non-agricultural activities. This evaluation includes assessment of the biophysical, economic and social factors that potentially could constrain the use of the land for particular horticulture and agriculture enterprises.

Knowledge of the landscape described above will dictate the relative suitability of land for these activities and will help with the development of plans to implement sustainable production systems.

Agricultural production across the Bass Coast region is largely determined by the soils and their inherent fertility.

