

(vi) **Goroke Unit.**-This is moderately undulating land in which broad ridges, at least 50 feet high, alternate with troughs containing chains of lakes or swamps.

The ridges run in a SSE-NNW direction, and usually occur discontinuously at about mile apart, but they are more continuous and pronounced at about five miles apart. The main ridges frequently have smaller ridges of sand lying at their eastern sides. The lakes and deeper swamps are of sub-circular outline, and commonly have conspicuous lunettes.

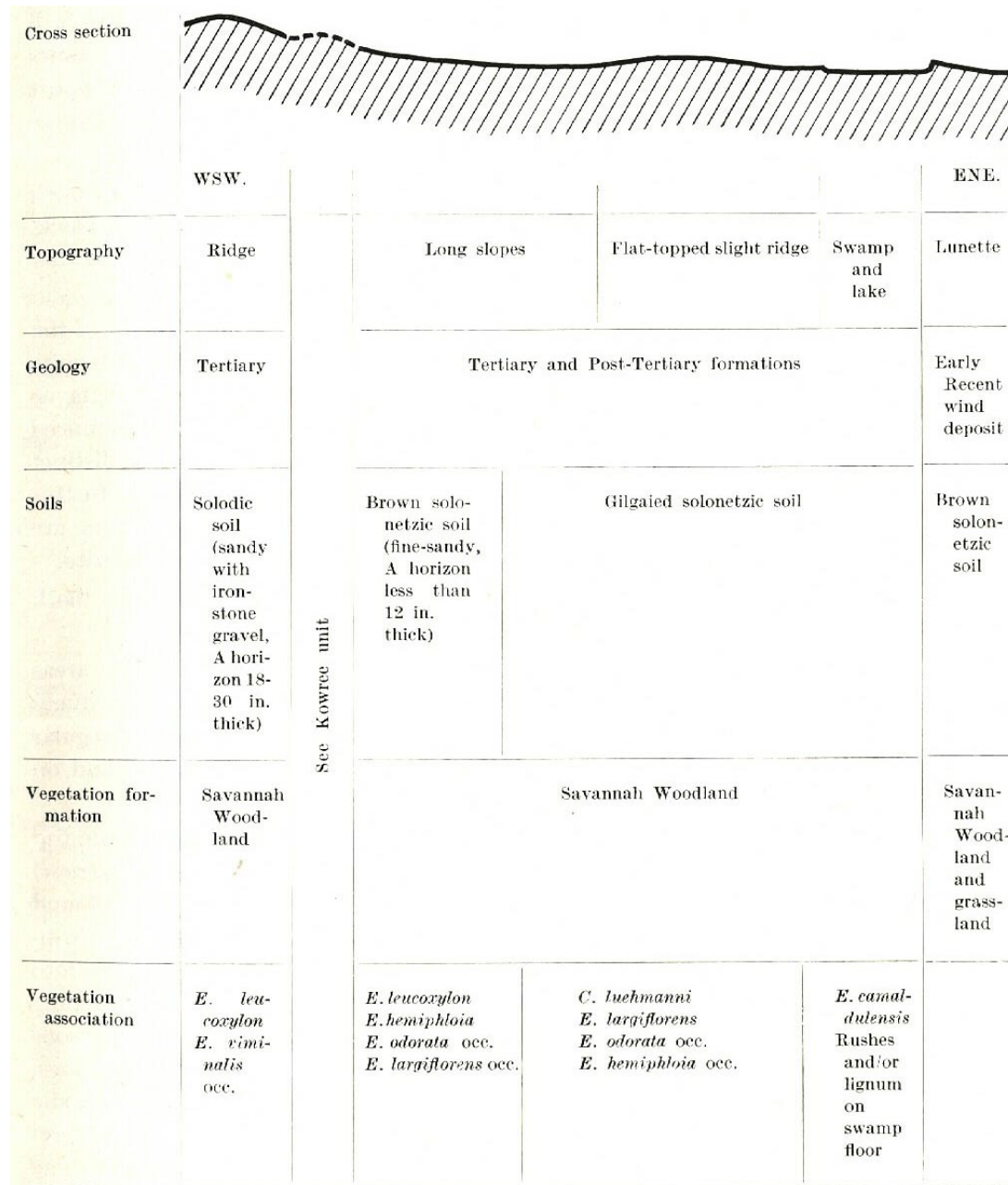


Fig 22 – Goroke Unit

This Goroke unit is sharply defined on the north by the Little Desert unit, the boundary line running almost due east-west for the whole of the Shire. It adjoins a number of areas of the Kowree unit, these in fact usually being the more prominent ridges described above, and it grades into the Ullswater unit in the south, the Benayeo unit in the south-west, and the Neuarpur unit in the west.

There is some internal variation over the mapped extent of the unit. The full topographic sequence as shown above is not always developed to its full extent. For instance, the ridges when in a subdued

form may not always culminate with the deep gravelly sandy solodic soils and associated deep sand dunes, but consist of fine-sandy solonetzic soils right over their summit; also on the flat summits of some ridges gilgaied soils may develop. Although the gilgaied soils usually support black box (*E. largiflorens*) and bull oak (*Casuarina luehmanni*), some areas of these soils on the Goroke unit bear instead a grassland of *Stipa* and other species.

There is some variation in the areas of gilgaied soils. In the poorly-drained, positions, the gilgai micro-relief is most emphasized and the soils are grey to black, whilst on the slopes the gilgai micro-relief is less evident and the soils are browner and redder.

An overall variation within the unit is that the ridges so characteristic of the unit are most pronounced in the east, and become subdued although still quite distinct to the west, where they grade into the very subdued ridges of the Benayeo and Neuarpur units. Since in the east and centre of the unit the ridges are pronounced and with slopes of 2°-3°, the inter-ridge system of lakes is developing a distinct lateral drainage system-that is, east-west streams cutting into the ridges. In this Goroke unit particularly, although also throughout the Shire, some ridges are capped with mottled sandstone which closely resembles some forms of laterite.

The parent material of the soils appears to be post-Miocene deposits, both sandy and clayey.