

## UNPUBLISHED REPORT 1965/12

### Examination of sphagnum peat deposits near Bronte

*by W. L. Matthews*

The Sphagnum swamp is being developed in the Brown Marsh area and can be reached by turning north from the Lyell Highway four miles on the Hobart side of Bronte. Triassic sandstone occurs west of the swamp and apparently underlies it. Dolerite is said to occur east of the area.

The deposit appears to fit Frazer's Highmoor class of peat which forms in situ and is made up mainly of decayed Sphagnum moss with minor quantities of other material such as grasses. This type of peat forms under conditions where the material forming the deposit grows and decays simultaneously but the rate of growth is greater than the decay rate.

The marsh is being worked by Mr N. Hurst of Bronte and Mr Gourlay of Ouse and covers about 140 acres. Probing of the deposit by Mr Hurst has indicated a maximum depth of 14' with a probable average of 9' over the whole area. Draining of the southern third of the swamp is in progress with trenches up to 4' deep. It is planned to use the top 3'-4' of the material at first because of its more specific uses but it is expected that the lower material, which has more general uses, will be excavated.

The swamp vegetation consists mainly of Sphagnum moss with some reed-like grasses. Sections in the drains show a brownish fibrous material which has some banding. On exposure to air the material tends to darken to an almost black colour. In some parts the peat is black when first excavated. Mr Hurst has looked at a section in the deepest part and the colour tends to darken with depth (i.e. the older material is more decomposed). The dark material near the surface in some localities may mean that no new growth of Sphagnum has taken place in these areas in recent times. The banding of the material is possibly due to either a climatic change or a slight difference in the make up of the material forming the peat.

Some wood fragments and limonite nodules have been found in the peat.

*[24 June 1965]*