

Specimens of *Malvacipollis diversus* are particularly common at 4460 and 4480 feet and both samples contain rare and poorly preserved specimens of diagnostic *Lygistepollenites balmei* zone fossils, suggesting reworking and possibly a hiatus or disconformity between the Lower *M. diversus* and *L. balmei* zones.

Palynomorphs indicative of the *Lygistepollenites balmei* zones occur from 4500 to 4852 feet. The shallowest sample from the Upper *L. balmei* zone is at 4500 feet in which the last (youngest) occurrences of *Gambierina eawardsii*, *Herkosporites elliottii*, *Polycolpites langstonii*, *Basopollis mutabilis*, *Camerozonosporites bullatus* and *Nothofagidites asperoides* are recorded. The deepest sample from the zone is at 4602 feet and in Kon Kon-1, the following species occur initially within this zone:

Juxtacolpus peiratus (only occurrence)
Tetracolporites textus (only occurrence)
Haloragacidites harrisii
Myrtaceidites mesonesus/parvus
Parvisaccites catastus
Proteacidites annularis
Camerozonosporites bullatus (only occurrence)
Nothofagidites asperoides (only occurrence)
Peromonolites velosus
Cyathidites gigantis
Nothofagidites brachyspinulosus
Periporopollenites demarcatus
Proteacidites incurvatus

The section between 4650 and 4852 is assigned to the Lower *Lygistepollenites balmei* zone which contains *Perotrilites morganii/jubatus* (4800-4650 feet) and *Polycolpites langstonii* (down to 4852 feet). Palynomorph assemblages from this zone are rather monotonous, consisting mostly of long-ranging species and rare index fossils. Microplankton in both of the *L. balmei* zones are rare and their occurrences are sporadic. Proteaceous pollen, although fairly common, are represented almost exclusively by small, morphologically simple forms whose stratigraphic utility is uncertain. Of possible importance is the fact that assemblages from shale samples between 4500 and 4800 feet are dominated by specimens of *Dilwynites granulatus* and the spore-pollen from the shales are considerably less well preserved than those from the intervening coal at 4602 feet. In addition, the assemblage from the coal is dominated by specimens of *Gleicheniidites* spp. as is the assemblage from the coal at 4445 feet.

The deepest fossiliferous sample in Kon Kon-1 is the coal at 4904 feet. The assemblage from this sample is assigned to the *Tricolpites longus* zone based on the occurrence of *Tricolpites renmarkensis* and *Proteacidites otwayensis*. The spore-pollen assemblage, unlike those from coals higher in the section, is dominated by specimens of *Phyllocladidites mawsonii* and those of *Stereisporites punctatus* are fairly common. Samples between 4911 and 5010 feet are barren, and no zone diagnostic species were identified from the sidewall core at 4890 feet.