sites for lichens and here are found: *Siphula medioxima, S. roccellaeformis, Psoroma buchananii, P. sphinctrinum, P. hirsutulum* and *Pertusaria dactylina.*

(d) Lichens are not common elements of the grassland surrounding the bog. Robust forms of *Claudia aggregata* are most commonly encountered together with *Sphaerophorus tener.*

The lichens collected from the Mount Anglem area are listed in Table I. Voucher specimens of the majority of records are deposited in the Otago University Herbarium. The classification used is that of Mattick (1954), with modification. Authorities for specimens quoted in Table I are given in Zahlbruckner (1927), and Lamb (1963) unless otherwise stated.

DISCUSSION

Lichens were collected from the north-facing slopes, the summit plateau and the western ridges of Mount Anglem, Stewart Island. Ninety-five species are recorded, distributed amongst 19 families and 35 genera, in fact a greater number of lichen species occur in this area than do species from higher groups reported by Wells and Mark (1966). Lichens are conspicuous on exposed rocks, where they are more successful as colonisers than bryophytes. On the ground, species of *Siphula* are important in the colonisation and stabilisation of trampled and wind-eroded areas: *S. decumbens* is locally common in wet sites. This aspect of ± active lichen colonisation, which is striking in this locality, has been observed in several other alpine regions of the South Island (Murray, 1963; Galloway, 1966).

Comparing the lichens from Mount Anglem with the records published for Secretary Island (Murray, 1963), which is not far distant in Fiordland, enables common features to be seen. In both areas *Siphula medioxima* and *Sphaerophorus tener* are the dominant grassland lichens, while a normal lichen of alpine grasslands and tundras, *Thamnolia vermicularis,* is virtually absent from Secretary Island and Mount Anglem. *Sphaerophorus tener* is the most wide ranging terricolous lichen on Stewart Island, occurring commonly in grassland on the Table Hill Highlands farther south, besides being a dominant epiphyte (usually in a fertile form) in the Stewart Island forests. Compressed forms of *Stereocaulon* are common to Secretary Island and Mount Anglem, while the ubiquitous yellow and grey biotypes of *Rhizocarpon* are the dominant saxicolous micro-lichens. *Alectoria nigricans* and *Usnea contexta* are locally common on Mount Anglem; *U. contexta* being widespread on the summit plateau while *A. nigricans* is common on the ridges farther west. This association, which is typical of many alpine regions in the South Island, is absent from Secretary Island. *Cetraria islandica,* commonly associated with the above two species, was not found on Stewart Island; this lichen also appears to be absent from alpine localities west of the Main Divide (Galloway, 1966).

A puzzling feature of the lichen flora of this area is the virtual absence of the genus (*Usnea*) *Neuropogon.* According to Lamb (1939, 1948, 1964) the centre of distribution of this genus is Antarctic to sub-Antarctic, with associated centres in alpine regions of New Zealand and South America. If one accepts Du Reitz's assumption (1929) that a genus has originated in the region of its present greatest differentiation, the paucity of *Neuropogon* on Stewart Island is not readily explained. The occurrence of *Thelidea corrugata* on Mount Anglem is an interesting extension of the restricted distribution of this plant in New Zealand. *Thelidea* is a monotypic genus, described by Hue (1901), for plants collected from Campbell Island in 1874. It also occurs in the Auckland Islands and was discovered in New Zealand in the Awarua peat bogs (Martin, 1960). Plants typically occur in sub-alpine peat bogs and have been collected from the Rakeahua flats on Stewart Island and from Mount Maungatua, Swampy Hill and Silver Peaks in the Dunedin botanical district.