

the unsuitability of the climate for sheep will be true in a less degree for horses, both of which, however, may find more congenial conditions on the tableland country, especially along the courses of the southern creeks, which are well known for luxuriance of vegetation and richness of soil. These creeks take their rise in basaltic formation, and it is to its presence that is due the oases in an otherwise desert country. Landsborough, in describing the Barkly tableland, which is drained by the Hebert, says—"In the course of the day we had travelled thirty miles, chiefly over fine country, doubtless "destined to rank as a first-class sheep run"—Op. cit., p. 53. Tropical South Australia has truly been said to be a land of grasses; the number of known species is about 130, and of these I collected over 50 between the Adelaide River and Pine Creek. But only some four or five are constituents of the grass plains and adjacent hill slopes. Some flats are almost exclusively occupied with *Anthistiria*, or with *Andropogon triticeus*, or with another congeneric species, whilst not infrequently the three are found in company. The two latter grasses acquire on the flats a height of from 6 feet to 8 feet, and exceptionally attain to 14 feet; but on dry hill slopes the same species dwindle down to 2 feet or less. The exuberant growth of grasses in the plains of the basin of the northern rivers should be capable of keeping alive large herds of cattle; but I very much doubt if there are all the requisites for the production of marketable beef. I have observed that there is an absence of the rich fodder grasses, and the much valued kangaroo grasses (*Anthistiria ciliata* and *A. frondosa*) are only locally abundant in the country traversed; whilst *Andropogon triticeus* or tall speargrass and its congener, *A. Australis*, seem to me ill-adapted for fattening stock. The tall speargrass is everywhere abundant in the open country, its hard and cane-like flowering stalks growing to 14 or 16 feet in height; the other common grass, *A. Australis*, is not so strong a plant, but is equally deficient in succulency and leaf. The density of the growth of the grasses on the flats defies all opposition to the establishment of other herbaceous species; but when external agents exercise their sway, then a herbage of panick grasses and some sedges take possession of the soil—the former on the drier ground chiefly, the latter on the more humid surfaces. Whether or not this improvement can be maintained without the intervention of man and domestic animals, or can be extensively brought about, is a question which I doubt if any one can yet give answer; but, nevertheless, it is true that such a change has supervened over very limited areas, where the balance of nature has been disturbed and maintained by the agencies referred to.

I have, &c.,

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