

footnotes, where they do not break the continuity of the descriptive text, and of adding further geological information in an appendix is useful in drawing attention to the geological value of an interpretation of the physiography in a paper written primarily to explain and describe the land forms. This method I adopted in "The Physiography of the Middle Clarence Valley, New Zealand."¹

In the case of my paper "Block Mountains in New Zealand," to which Professor Rich refers, the age of the covering strata in Central Otago is uncertain within fairly wide limits. The statement that they are probably Oamaruan but possibly Wanganuian would not convey much definite information to American readers. When I was preparing the paper for publication the temptation to discuss the age question was strong, and I yielded to it. Realizing that the discussion would be out of place in the body of the paper I placed it in an appendix, which, however, the editor wisely omitted.

This article was not written with a dual purpose. The geological significance of the land forms of Central Otago, as well as the closely related forms throughout New Zealand had already received full attention in a paper entitled "The Structure and Later Geological History of New Zealand," published in the *Geological Magazine*.² This and "Block Mountains in New Zealand" were in preparation at the same time, the one frankly geological, the other geographical. As such the latter was intended for publication in a geographical periodical and was offered to the Royal Geographical Society, which was unable, however, to find space for it in its *Journal*.

C. A. COTTON

VICTORIA UNIVERSITY COLLEGE,
WELLINGTON, N. Z.

"A WAVE OF LIFE"

AN interrelation of organisms somewhat suggestive of Hudson's "wave of life" was observable about the University of Montana

¹ *Geog. Jour.*, vol. 42, 1913, pp. 225-46.

² December 6, vol. 3, 1916, pp. 243-249, 314-320.

Biological Station on Flathead Lake the past season.

During the summer of 1917 flowers bloomed luxuriantly about the station grounds, and humming-birds and butterflies visited the flowers very commonly. Rodents were present in normal numbers, but attracted no particular attention.

Conditions were markedly changed during the summer of 1918. For unknown reasons the rodents became very abundant. Pine squirrels and chipmunks were everywhere present. *Spermophiles* appeared on the station grounds for the first time in the history of the institution. The chipmunks quickly cleared the ground of flowers and ascended to the tops of trees to strip the honeysuckle vines of their blossoms. Deprived of their natural food in this vicinity humming-birds were rarely seen and butterflies were very uncommon. Pine squirrels kept the ground under the pine trees well strewn with pine cones, but the effect of this inroad upon the pine cones was not so apparent upon other forms of life.

Weasels, which were not observed about the station the preceding summer, were seen several times during 1918. Great horned owls hooted at night in the nearby tree tops. These birds had not been reported for 1917.

G. B. CLAYCOMB

UNIVERSITY OF ILLINOIS

QUOTATIONS

THE PHYSIOLOGY OF A WORKING DAY

GRADUAL reduction of the hours of labor from ten or nine to eight, and now to seven or six, must have made many people wonder whether some scientific basis might not be found for the hours which should be worked in various trades. Major A. C. Farquharson raised the matter in the discussion on the second reading of the Ministry of Health Bill. Speaking as one who had spent the greater part of his professional life in the service of the miner, he expressed his astonishment that members of the House of Commons should be so ready to put forward the idea that the number of hours a man should work day by day was to be settled by the arbitrary