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Notes on Lake Ellesmere Trout

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IN 1958 arrangements were made for investigating the trout of Lake Ellesmere. It appeared that the fish were neither as plentiful nor as large as they used to be, and while no comparison of abundance was possible, as no records of the amount of fish taken yearly had ever been made, several scientific works giving data on size and growth and one recording food had been published. A comparison of these data of present-day fish with those recorded some years ago seemed likely to give general information of value.

The principal material collected in 1958 consisted of the scales and internal organs of a hundred trout taken by an angler, who modestly wished to remain incognito, about the mouth of the Selwyn River in October, November and December. Some of the fish were taken in the lake off the mouth of the river and others at various points along the deep channel of the river from the mouth to about two miles above. Particulars of the length, weight and date of capture together with the serial number were recorded on the scale packets which were identified with the internal organs by means of a numbered tag attached to the latter before preservation in formalin solution. Investigation of the material was commenced, but the work was interrupted by illness and was never completed.

In the present dearth of information on trout, a summary of the information available should be of some value, particularly as the section dealing with food was complete. Examination of scales had only commenced, but size, condition factor and sex ratio had been worked out. Other unpublished data existed in the form of particulars of 122 spawning fish collected by the writer from the Selwyn River at the Main South Road on 24 July 1950. These various data, all bearing on Lake Ellesmere trout, have been brought together and compared with such published records as exist.

Lake Ellesmere is a brackish lagoon some 40,000 acres in extent situated on the Canterbury coast just south of Banks Peninsula. Its site was once occupied by the sea, from which it has been separated by a shingle spit thrown up by the waves and composed principally of material transported from the south (Speight, 1930). In its natural state the lake remained isolated from the sea for the greater part of the time, but about once a year the water of its tributary streams ponded behind the spit would rise sufficiently to effect an opening, and the level would fall to about that of half tide. The opening would remain for days or weeks, but would be blocked by the first southerly storm of sufficient magnitude to cause the necessary

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