

together with unpublished information collected (by R.N.Z.N. Dockyard personnel using an alcohol thermometer) from the vicinity of Calliope Dock during 1959–64 inclusive. With data irregularly collected over a long period of time only the broadest interpretation is possible, particularly as slightly different localities are involved.

If the grand monthly means so calculated are plotted against time and a smooth curve drawn through the points, then the mean maximum and minimum temperatures (and hence the mean annual range) may be deduced together with the approximate dates on which they occur. At Auckland the maximum sea surface temperature of about 21.8° C occurs around mid-February, the minimum temperature (about 11.9° C) at the beginning of August, and the mean annual range is thus about 9.9° C. Hounsell (1935) gives figures for the average yearly range of sea surface temperature over the years 1929–32 at various localities in the vicinity of Auckland and, as might be expected, the range in the open sea is less than in estuarine waters.

TABLE III.—Rainfall (inches) at four stations in the Auckland area during 1963, compared with monthly averages at Auckland over the period 1921–50 (latter data from N.Z. Official Yearbook, 1964).

Recording Station	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Albert Park	2.65	2.54	3.94	3.54	3.03	5.17	4.51	4.08	2.78	0.83	2.92	1.88	37.87
Whenuapai	3.08	3.58	4.26	3.86	2.95	6.35	5.85	3.08	4.85	1.20	5.15	2.94	47.15
Nihotupu	4.42	5.95	7.68	5.81	6.22	9.12	7.98	5.05	6.90	4.90	6.41	5.52	75.96
Dairy Flat	2.31	2.30	5.20	4.12	3.10	7.44	6.64	3.84	3.66	1.00	5.53	2.43	47.57
Auckland 1921-50	3.3	4.1	2.8	4.3	4.8	5.5	5.5	4.3	3.8	4.2	3.2	3.1	48.9

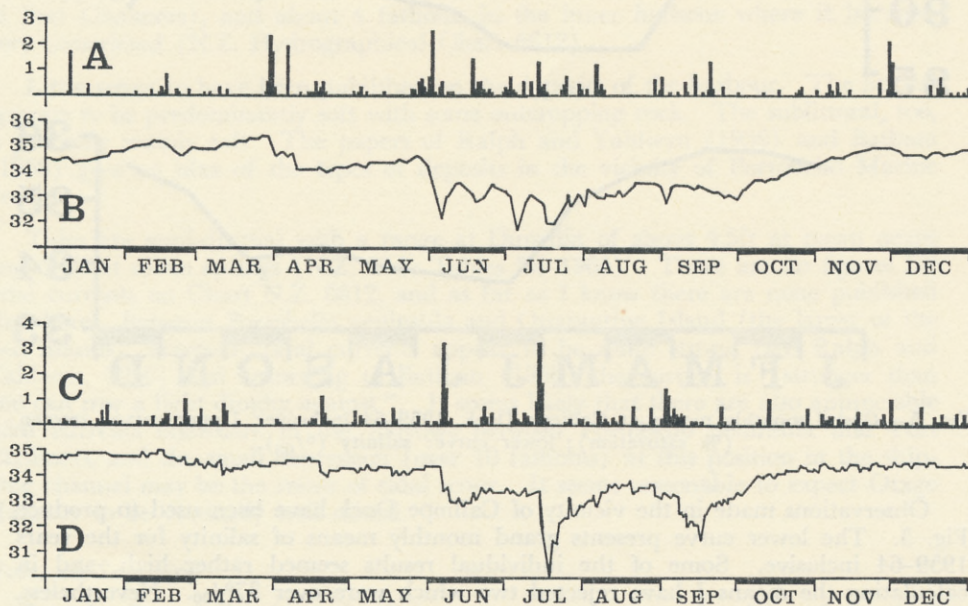


FIG. 4.—(A) Daily rainfall (inches) at Dairy Flat, 1963. (B) Thrice-weekly salinity (‰) at Prince's Wharf, 1963. (C) Daily rainfall (inches) at Ross Creek, 1963. (D) Daily salinity (‰) at Portobello, 1963.