

August 13.—Station 72: At daylight proceeded to test the ground in Palliser Bay. Shot starboard trawl at 7.5 a.m. in 14 fathoms, black-sand bottom, and hauled up at 8.55 a.m. from 13 fathoms, fine-black-sand bottom. The haul consisted of 21 crayfish and a small number of red-cod, gurnard, conger-eel, &c. The result was poor, but the haul was a very short one.

Station 73: Shot the net again at 8.45 a.m. in 10 fathoms on a fine-sand bottom. The ground inside of here has been trawled over by the "Phantom," but I understand a bad foul occurred on each of the two hauls she made. At 9.35 a.m. foul ground was indicated, so hauled up 15 fathoms. The result was a fair haul with considerable variety, soles, lemon soles, crayfish, kahawai, tarakihi, schnapper, hapuka, moki, and gurnard being represented.

Station 74: Shot the net again at 10.15 a.m. in 20 fathoms, fine-sand bottom. Hauled up at 11.30 a.m. from 29 fathoms, black-sand bottom. Soundings taken during this haul indicated fine trawling-ground. The result was a considerable haul of crayfish, lemon soles, gurnard, schnapper, and tarakihi.

Station 75: Shot trawl again at noon in 29 fathoms, and towed south, hauling up at 1.13 p.m. in 40 fathoms, bottom soft mud. The boards had been buried in this mud. It appears to be the same kind of clay and mud that was met with off Motunau Island. This haul comprised 65 tarakihi, 1 schnapper, and 8 crayfish only. Here we appear to have run out of the flat-fish ground, none being taken in this haul. The ground was very soft and clayey, and it was not considered prudent, with only one net to rely on, to risk another haul in this locality. Steamed S.S.E. to test the deeper waters. A strong S.E. wind with falling glass made further trawling impossible. At 55 fathoms found the bottom of the same clayey nature, and the weather coming in thick from the S.E. we steered for Castle Point, off which we lay-to for the night, the weather being S.E. with drizzling rain.

August 14.—Station 76: Steamed in towards the land to ascertain position, the weather still being thick. A number of soundings were taken, all of which indicated soft mud. Mr. Waite's bucket dredge was put down in 100 fathoms, and a sample taken. Steamed in towards Castle Point, and the bottom becoming more sandy as the land was approached, the trawl was shot at 10.20 a.m. in 28 fathoms on a dark-sand bottom, 3 miles E. x N. of Castle Point. Towed N.N.W., and at 11.30 a.m. hauled up the net in 19 fathoms, dark-sand bottom. A fair bag was the result, with a very considerable variety, consisting of lemon soles, soles, red-cod, gurnard, crayfish, schnapper, tarakihi, conger-eel, moki, &c.

Station 77: Continued to zigzag in a northerly direction, taking frequent soundings, all of which indicated even ground and good trawling-bottom. At 2.10 p.m. shot the trawl in 23 fathoms off Akitio River, and towed N.N.E., hauling up at 4.10 p.m. in 20 fathoms, sand-and-mud bottom. The result of the two hours' haul was somewhat disappointing, but again a very good variety was obtained, sixteen species being represented. A large number of red-cod were taken in this haul, also 12 gurnard, 1 moki, 2 ling, 160 crayfish, 2 conger-eels, 4 flounders, 2 tarakihi, 5 schnapper, and a few soles. This bay appears to be all good trawling-ground, and at certain seasons must yield good results, as almost all the local edible fish were represented in the day's fishing.

At 4.20 p.m. steered E. $\frac{1}{2}$ N. to test the bottom in the deeper waters, but at 50 fathoms the soundings gave very soft mud, of a clayey nature, into which the lead had sunk 8 in., and a mass of it was brought up with the lead. This is unlikely ground for flat-fish, and risky for the trawl. Steamed off shore for the night.

August 15.—Station 78: Sounded at 6.15 a.m. 6 miles due east of Cape Turnagain, and got 62 fathoms, very soft mud bottom. At 7.30 a.m. got 24 fathoms with fine-dark-sand bottom. This is the same bottom as we got yesterday in the same depth. The net was shot here at 7.40 a.m. $4\frac{1}{2}$ miles N.E. x N. of Cape Turnagain, and hauled up at 9.10 a.m. from a fine-sand bottom in 18 fathoms. The result of this haul was again very varied, but somewhat poor in quantity, consisting of 80 red-cod, 13 schnapper, 25 crayfish, 10 lemon soles, also tarakihi, gurnard, and conger.

Station 79: Steamed in towards the beach to try a short haul. At 9.55 a.m. shot the net in 9 fathoms, bottom fine sand. A foul was at once experienced, the ground-rope having parted and the net being badly torn.

Station 80: From 10.20 to 11.15 a.m. a number of soundings were taken before shooting again, all indicating good trawling-ground. The net was put down at 11.15 a.m. in 16 fathoms, and hauled up at 12.10 p.m. in 17 fathoms from fine-sand bottom. The result was not very encouraging, only 1 brill, 1 sole, 5 conger-eels, 2 schnapper, and a number of red-cod and dogfish being taken. Steered N.E. and took numerous soundings, all of which indicated uneven bottom, mostly soft clay and mud, similar to that found in 40 fathoms all the way up this coast. Men employed all day in repairing nets. Anchored inside of Bare Island for the night.

August 16.—Station 81: Fresh southerly wind and considerable sea. Hove up anchor at 7 a.m. The trawl was shot at 7.35 a.m. in 16 fathoms, bottom fine dark sand. Hauled up at 9.15 a.m. from 23 fathoms, fine-sand-and-mud bottom. The result was a good bag of tarakihi, crayfish, schnapper, red-cod, lemon soles, gurnard, &c.

Station 82: Shot trawl again at 9.35 a.m. in 23 fathoms, trawling S.W. x W., and at 10.35 experienced a bad foul, the cod end and squares being torn away. At 10.50 a.m. steered E. x N. to take soundings and nature of the bottom where none are shown on the chart. Strong southerly wind, and too much sea for trawling. Soundings showed soft-mud bottom. Wind and sea increasing we put into Napier for net-repairs, and to take in coal and provisions. Arrived at Napier 7 p.m.

August 17.—In Napier, coaling and repairing nets.

August 18.—Sunday. At Napier wharf.