

We commenced operations in Pegasus Bay on the 10th, working there and to the north of Banks Peninsula until the 17th, when we went on to Akaroa. We left Akaroa at 6 a.m. on the 19th March to prospect off the Heads, but a heavy swell prevented any work being done, and it was decided to go to the south of Banks Peninsula, where the net was put down about five miles off Lake Ellesmere Spit at 9.35 a.m. Work was continued down the coast off the Ninety-mile Beach to Timaru, where we arrived at 5.35 p.m. on the 20th. Continued operations off the Ninety-mile Beach, Timaru, and the coast south to the Waihao River, in depths varying from 5 to 50 fathoms, and from one to thirty miles off shore, until the 30th March, when we proceeded south to prospect the coast from the Waihao to Oamaru. Fine weather was experienced at Oamaru from the 30th March to the 4th April. In that time the ocean was prospected from the Waitaki River to All Day's Bay, in depths varying from 4 to 46 fathoms, and distances from half a mile to twenty miles off shore.

On the 5th April we left Oamaru and proceeded further south to work off the coast from Moeraki Lighthouse to the Otago Peninsula. Operations were continued along this range of coast until the 13th, the bottom being tested in depths from 6 to 50 fathoms. Unsettled weather was experienced while in this neighbourhood, several days being unfit for trawling. We left Port Chalmers for the Bluff and Foveaux Straits on the 13th April, intending to prospect off the Taieri Beach and in Molyneux Bay on the way south, but owing to a north-east wind setting in, with a choppy sea, we were able to do very little work at either place, and after one haul of the trawl-net in Molyneux Bay proceeded on to the Bluff. Arriving at the Bluff on the 14th April, work was continued in Foveaux Straits and around Stewart Island until the 26th. During that time Toitoto, Riverton, Tewaewae Bays, and part of Foveaux Straits were prospected. Stewart Island was circumnavigated, and the principal bays and inlets round that island tested for trawling-grounds. Having finished the preliminary survey for trawling-grounds in southern waters, we left the Bluff for the north on the 27th April. Unfavourable weather again prevented us from completing the survey of Molyneux Bay on the return from the south, and we proceeded on to Timaru, arriving there on the 28th.

As a considerable extent of good trawling-bottom was found off the coast of Timaru and the Ninety-mile Beach when the expedition was working south, but with very few fish at that time, I determined to further test certain areas to ascertain whether the different tides and weather conditions obtaining at this time had affected the supply of fish. Two days were devoted to this work with fair results, the best being obtained in 12 and 13 fathoms. Leaving Timaru on the 2nd May, a southerly storm prevented the further investigation of grounds between Timaru and Banks Peninsula, the little steamer having a rough time until East Head was rounded.

In the shelter of Banks Peninsula three hauls of the net were made, arriving at Lyttelton on the 3rd. Having coaled, the "Doto" sailed for Wellington at 7 a.m. on the 4th April. Arriving off Wellington Heads early the following morning, it was decided to try a few hauls of the net in Palliser Bay before going in to port, but soundings made in different parts showing rough bottom at every cast of the lead the net was not put down. As some repairs were necessary to the gear before proceeding further with the cruise, the Government allowed the "Doto" to go out of commission for a week to have these effected.

Resuming work on the 14th May, we left Wellington on that date for Cloudy Bay, and continued working there until the following afternoon, when, owing to unfavourable weather conditions further work could not be carried on, we left for Nelson. From the 16th to the 28th was occupied in prospecting Tasman and Golden Bays. During that time two days were lost through bad weather, but by working at night when the weather settled we were able to get over most of the ground in that quarter. On the 28th May we left Nelson for Wanganui, intending to visit Admiralty and Guard's Bays *en route*, but had to shelter in Port Hardy Inlet for thirty hours. The weather clearing on the 30th the "Doto" left the anchorage in Port Hardy Inlet at 2.30 p.m. for Wanganui. The bottom was tested with the lead at various depths on the way across, and two hauls of the net were made off the mouth of the Wanganui River before going into harbour on the 31st. When the weather would allow work was continued in the Wanganui Bight and south to Kapiti Island until the 7th June. On that date the final haul of the trawl-net was made, and the vessel left for Wellington and Napier, as according to agreement she had to be delivered at the latter port at the termination of the charter period.

RESULTS OBTAINED AT DIFFERENT LOCALITIES.

In Pegasus Bay and off Banks Peninsula good results were obtained, both with regard to the character of the bottom for trawling and supply of fish. The net was picked up at No. 2 Station off a rocky bottom near Motonau Island; but with that one exception the bottom at all the other trawling and sounding-stations was either sand, soft sand, or mud; while market fish were plentiful and of good quality. This area being well sheltered and close to Lyttelton Harbour should be a profitable trawling-ground. A ready market for large quantities of fish would be found in Christchurch, the inland towns, and among the shipping at Lyttelton.

From Banks Peninsula to the Waitaki River there is a considerable extent of good trawling-ground. Shingle banks, however, exist at intervals, extending from close inshore out to 20 fathoms. Beyond the 20-fathom line the bottom, as far as tested, was soft sand, broken shell, and mud. These stony banks are probably formed by the stones and shingle brought down by the four large rivers that flow into the ocean along this range of coast. By reference to the map it will be seen that a large area of sand bottom was found off Timaru, this, although good trawling-bottom at the time it was worked, yielded only a moderate supply of the best market fish; it is probable, however, that at some other season good fish may be plentiful.

From the Waitaki River to Moeraki light we found an uneven bottom. Shingle banks exist off the Waitaki and at intervals south to Oamaru, with patches of sand bottom between. These