Anti-poaching operations in Antarctic waters are cutting the number of illegal boats there, the government says.

The patrol vessel HMNZS Otago left Dunedin this morning for a one-month annual monitoring trip in the Ross Sea.

New Zealand’s anti-poaching operations hit the headlines last summer when the navy vessel Wellington intercepted - but could not board - three falsely flagged ships catching toothfish.

However, the Ministry of Foreign Affairs and Trade said it had made significant progress this year.

Of the seven unregulated and unreported fishing vessels which have regularly fished the area, five have been detained in international ports and one was seized, it said.

It was all go this morning as the Otago left for its turn.

The ship has 75 staff, including an expert ice navigator and two fisheries officers from the Ministry for Primary Industries.

Commanding Officer Andrew Sorensen of the Royal New Zealand Navy. Photo: RNZ / Ian Tefer

Commanding officer Andrew Sorensen said illegal fishing had been a serious problem...

"It certainly used to be I think the work that we’ve been putting in has reduced the number of illegal fishing vessels that have been down there," he said.

Lieutenant Commander Sorensen said the Wellington last year gathered significant evidence that was used in prosecutions, and his crew was trained and ready for whatever happens in the Southern Ocean.