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The Greenland Fishery for Northern Shrimp (*Pandalus borealis*) on Flemish Cap (NAFO Division 3M) in 1997

by

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### INTRODUCTION

In 1997 (by September 1.) only two Greenland trawlers have been fishing on Flemish Cap. The fishery took place from May to July, and the total reported catch is 100 tons of shrimp.

Greenland catches on Flemish Cap have been decreasing since the beginning of the fishery, from about 3800 tons in 1993 to 2275, 2400 and 1107 tons in the last three years. The decreasing Greenland interest in the shrimp fishery in the area may be explained by reduction in number of trawlers, distance to the fishing grounds and unprofitable catch rates.

Logbook records from only one trawler is available for the present paper, covering a catch of 54 tons and 332 hours of trawling in May and June.

The Greenland fishery on Flemish Cap in 1996 was reported by Hvingel and Siegstad (1996).

### MATERIALS AND METHODS

Based on compulsory weekly reportings to Greenland authorities total catches and number of vessels in the Greenland shrimp fishery in NAFO Div. 3M were compiled by month from May to July 1997.

Catch and effort data from the only available logbook were analysed to show monthly distribution of catch, fishing effort and mean unstandardized catch rates.

No shrimp samples were available from the Greenland fishery on Flemish Cap in 1997.

### RESULTS

#### Total catches and no. of vessels.

Nominal catches of shrimp on Flemish Cap and number of vessels by Greenland from 1993 to 1997 (1993 and 1997 reported catches, 1997 preliminary) are

Year	1993	1994	1995	1996	1997
Catch, tons	3778	2275	2400	1107	100
No. of vessels	12	9	6	6	2

### Reported catches and unstandardized CPUE May to July 1997.

Reported catches and effort (from available logbooks) in 1997 are shown in the table below. Available logbook data only refer to fishing with single trawls (no twin trawls were used).

Month	May	June	July	Total
Catch, tons	44	10	46	100
Effort, hours	257	75	-	-
Raw CPUE	171	133	-	-

In May the catch rate is close to the level reported for the same month in 1995 and 1996, but there is no indication of a decreasing trend in June as found in earlier years (Hvingel and Siegstad, 1996). The data are – however – very limited.

### Geographical distribution of the fishery.

Fig. 1 shows the geographical distribution of catches in 1997, based on logbook data from May and June from only one trawler. Fig. 2 shows the distribution by month of effort, and Fig. 3 the corresponding catch rates.

The fishery took place along the western and northwestern slopes of the bank, with most catch being taken west of 46°W, where also most effort was spent and the catch rates were highest in both May and June. In May, however, almost 25% of the effort was spent at the northern tip of the Cap, and catch rates reached the level found in the west.

### Reported bycatch and discard.

Redfish is the only species reported as bycatch in the available logbook data from 1997, amounting to 0.4% and 0.7% of the total shrimp catch in May and June, respectively. This is at the same level as reported in 1995 and 1996 (Hvingel and Siegstad, 1996).

No discard of shrimp is reported.

## CONCLUSIONS

The Greenland shrimp fishery on Flemish Cap in 1997 is very limited compared to earlier years. By September 1. only two Greenland trawlers participated in the fishery, and logbook data from only one trawler fishing in May and June have been available to the Greenland Institute of Natural Resources. The fishery of this trawler took place along the western and northwestern slopes of the Cap, with an unstandardized mean catch rate in May at the same level as in 1995 and 1996. The catch rate in June does not show the increasing trend found in earlier years, but data are too limited to justify, whether this is an overall trend.

## REFERENCES

Hvingel, C. and H. Siegstad, 1996. The Greenland fishery for northern shrimp (*Pandalus borealis*) on Flemish Cap, NAFO Division 3M, in 1995 and 1996. NAFO SCR Doc. 96/99, Ser.no. N2782.

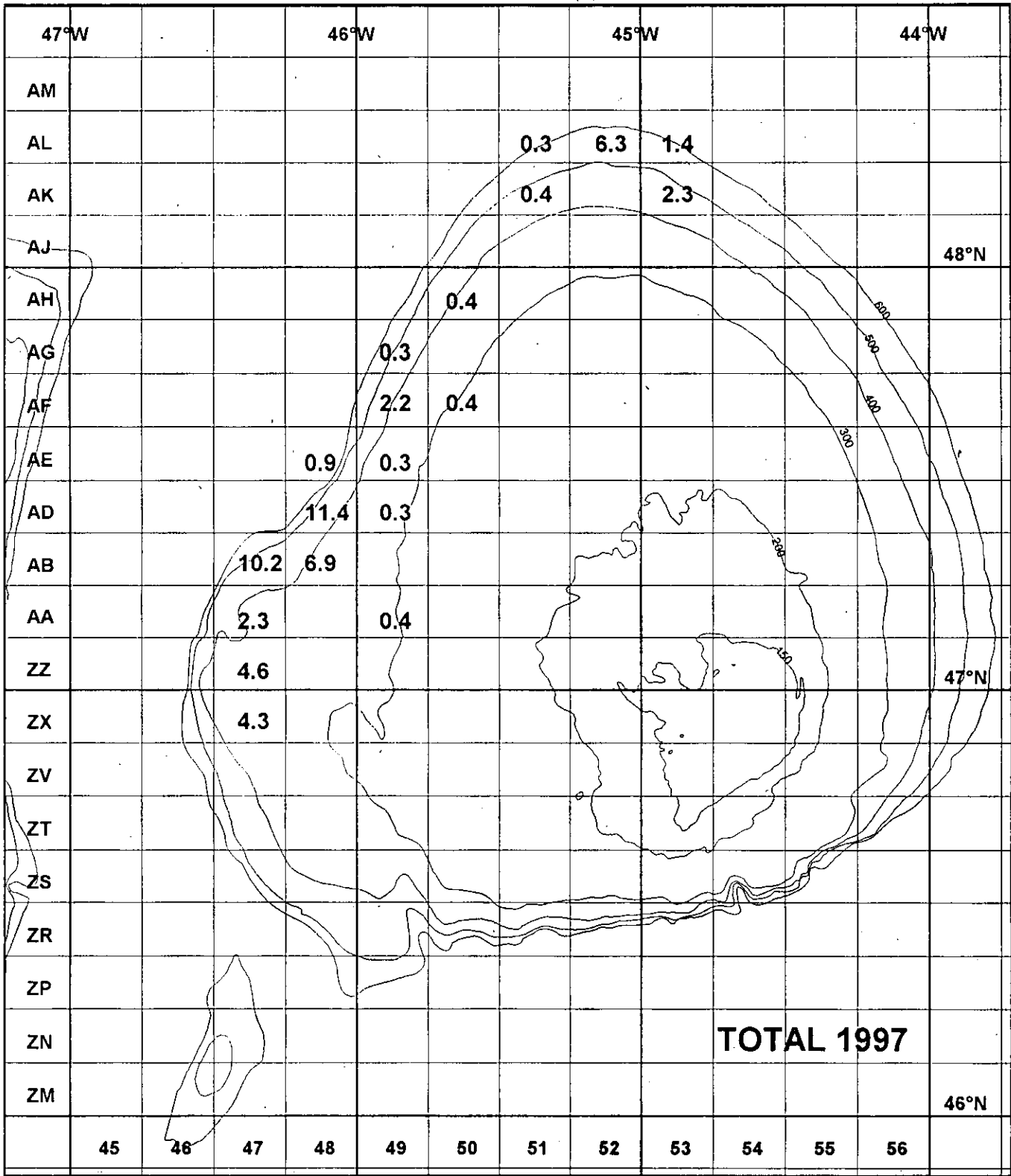


Fig. 1. Geographical distribution of shrimp catches in 1997 on Flemish Cap by one Greenland trawler (tons by statistical unit).

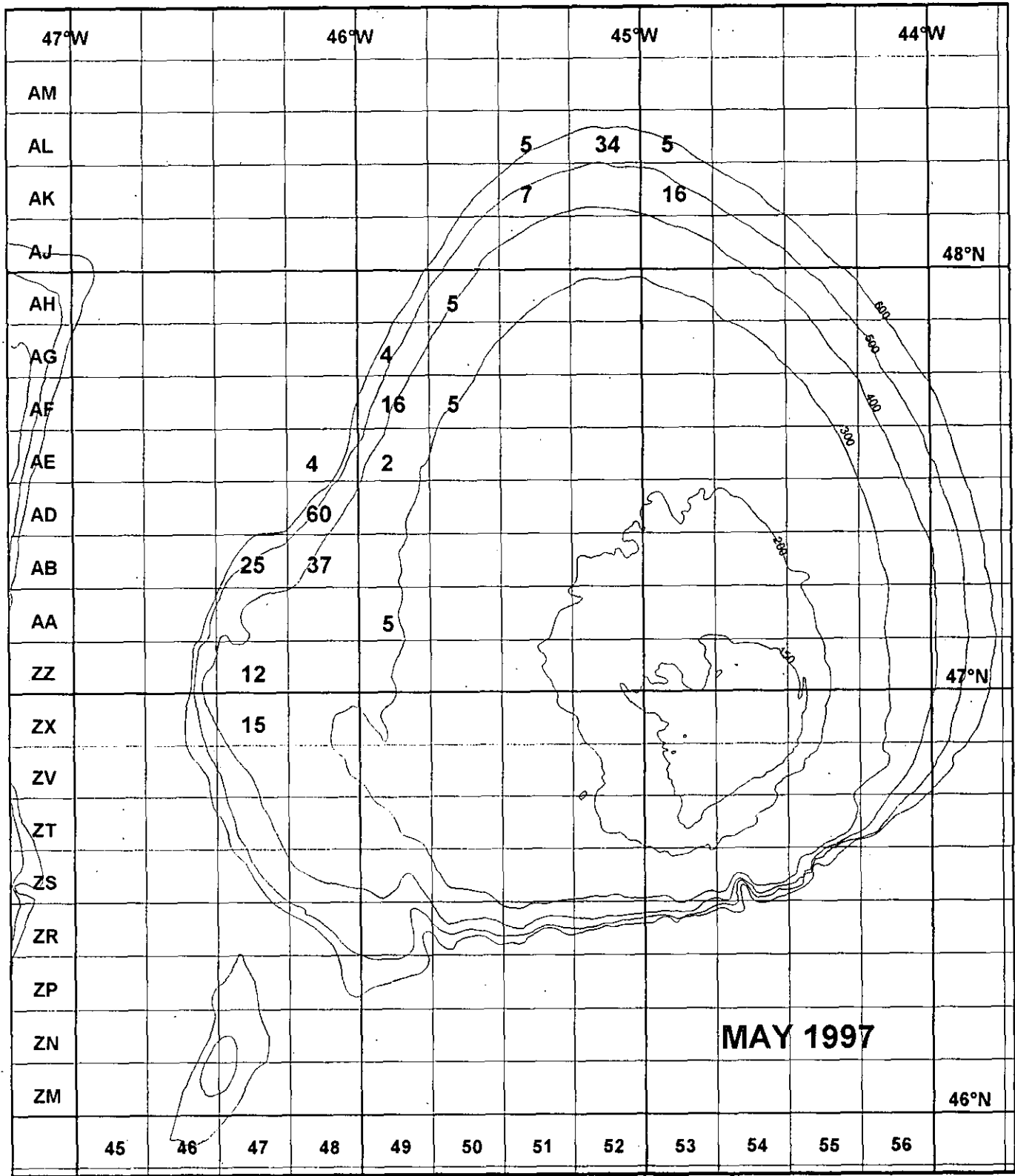


Fig. 2a. Geographical distribution of effort in May 1997 on Flemish Cap by one Greenland trawler (hours by statistical unit).

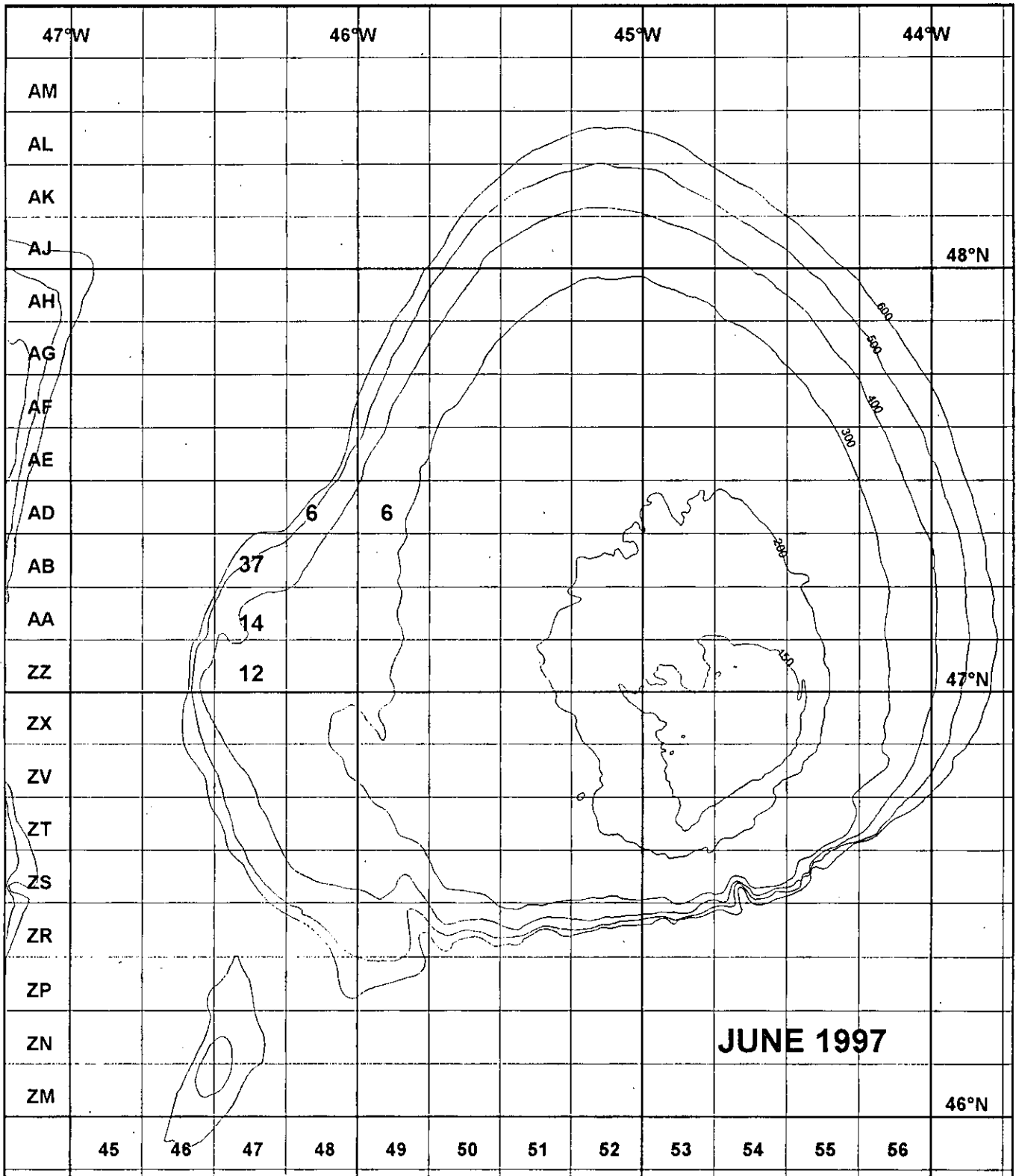


Fig. 2b. Geographical distribution of effort in June 1997 on Flemish Cap by one Greenland trawler (hours by statistical unit).

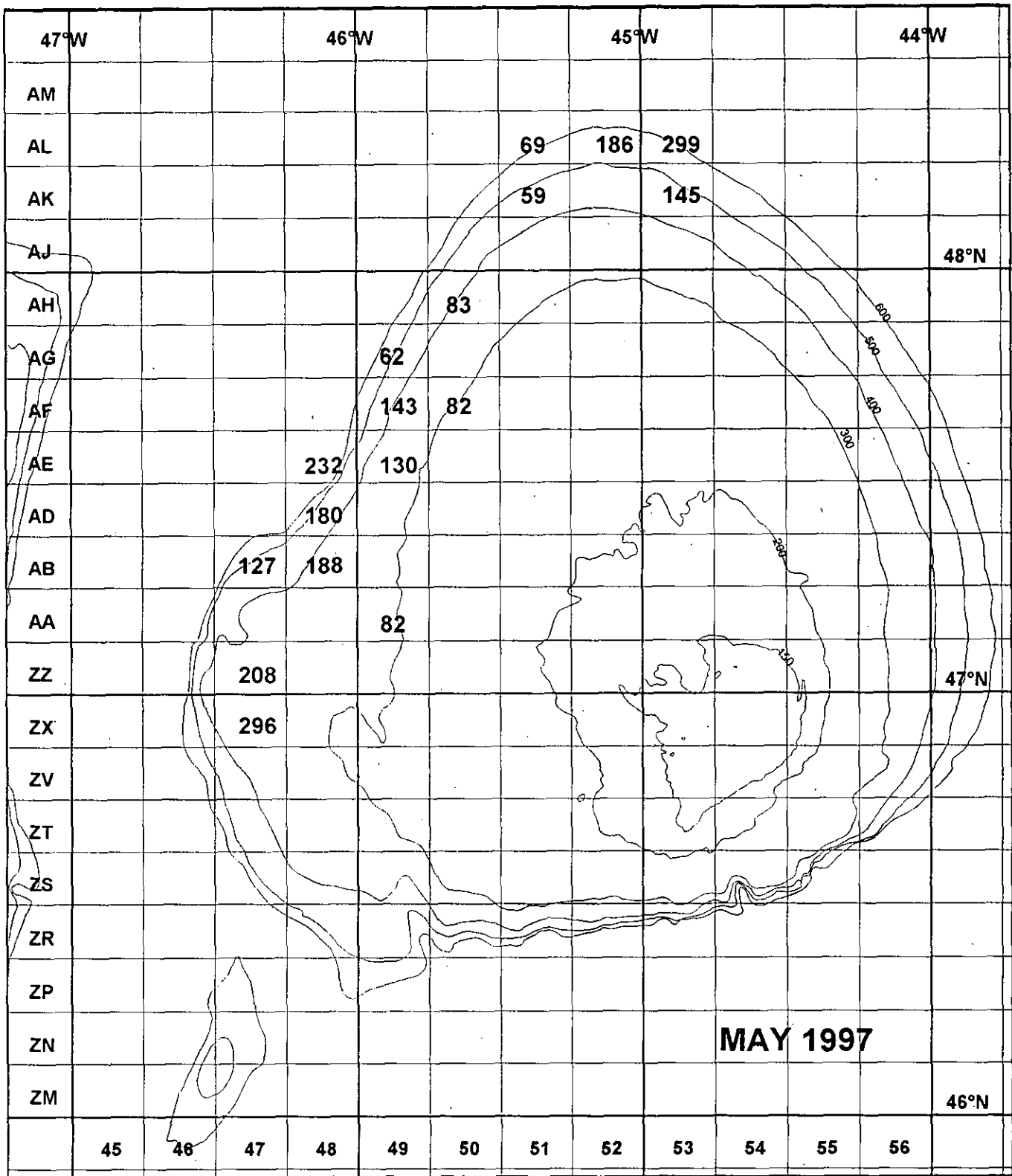


Fig. 3a. Geographical distribution of CPUE in May 1997 on Flemish Cap by one Greenland trawler (kg per hour by statistical unit).

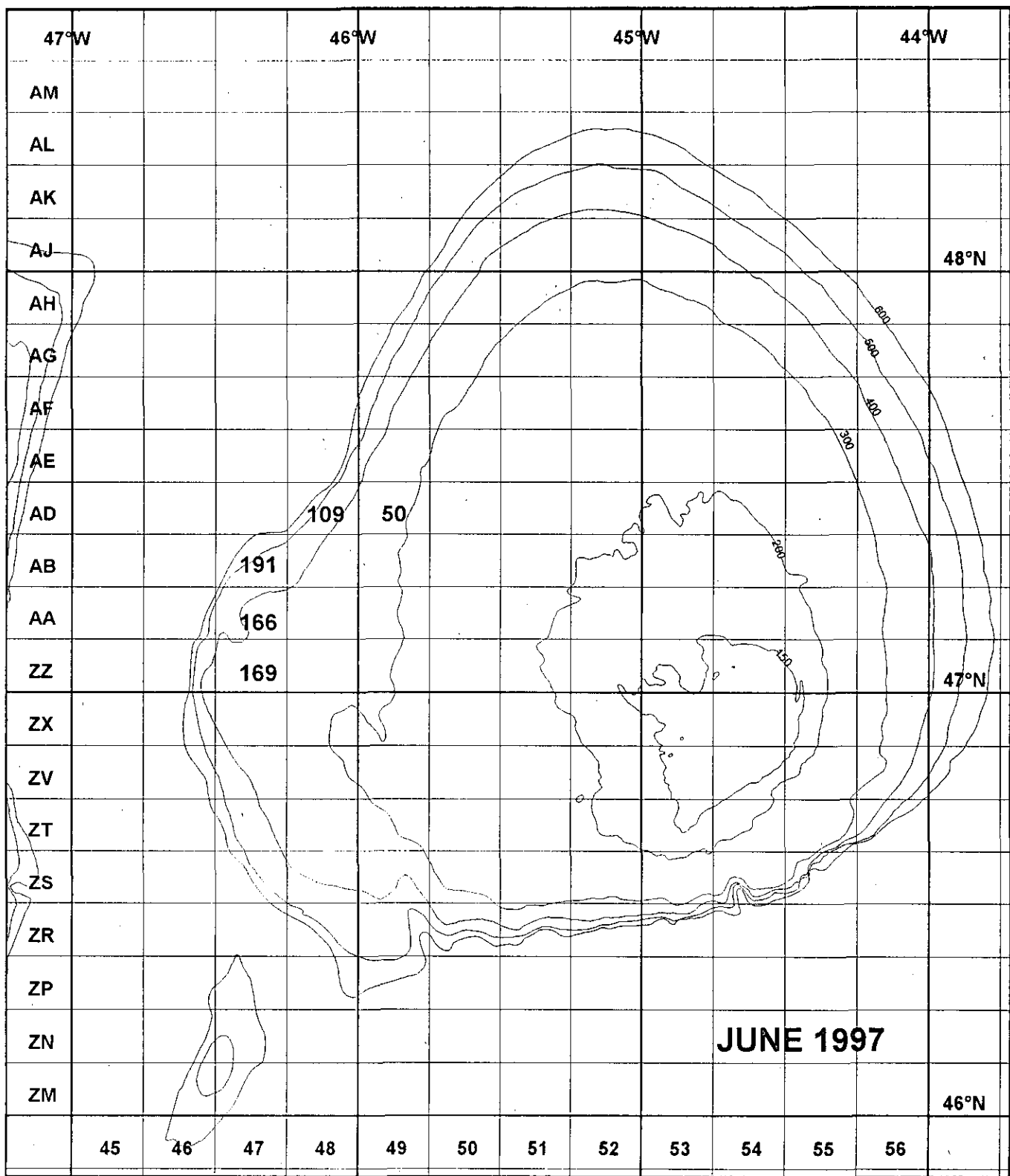


Fig. 3b. Geographical distribution of CPUE in June 1997 on Flemish Cap by one Greenland trawler (kg per hour by statistical unit).