

NOT TO BE CITED WITHOUT PRIOR
REFERENCE TO THE AUTHOR(S)



International Commission for the Northwest Atlantic Fisheries

Serial No. 5349

ICNAF Res. Doc. 79/II/23

SPECIAL MEETING OF STACRES - FEBRUARY 1979

Outline of Japanese Capelin Fishery in Subareas 2 and 3, 1975-78

by

H. Hatanaka
Far Seas Fisheries Research Laboratory
1000 Orido, Shimizu 424, Japan

Japanese capelin fishery in the ICNAF area commenced to operations in 1975 when two stern trawlers of 2500 GRT operated. In 1976 and on, 9 to 13 trawlers have engaged annually in the fishery.

In 1975, 2800 tons of capelin were caught during June-July in Div. 3NO. In 1976, most of the Japanese trawlers operations were made in Div. 3NO and some on experimental base in Div. 2J+3K and 3Ps during May-July. The total catch amounted to 5100 tons. In 1977, 4000 tons of capelin were caught during June-July from 3LNO and 800 tons during September-October from 2J+3K. In 1978, however, Japanese catch decreased sharply to 800 tons in Div. 3LNO and to almost negligible amounts in Div. 2J+3K. Because of the poor fishing, Japanese fleet left the capelin fishing grounds and moved to subarea 4 for Illex fishing (Table 1 and Fig. 1-4).

Values of catch per unit effort for four fishing seasons indicate that CPUE was highest in 1975 amounting to 50 tons per day. Fairly high values have been maintained up to 1977 but CPUE decreased sharply in 1978. It is also noted that catchable concentrations of capelin in Div. 30 have decreased from the 1977 fishing season.

Table 1. Japanese fishing effort directed to capelin and capelin catch in tons from 1975 to 1978.

| Year | Div. | May | | | | June | | | | July | | | | Annual | | | |
|-------|-------|--------|-------|-------|-----|--------|-------|-------|------|--------|-------|-------|------|--------|-------|-------|--|
| | | Effort | | Catch | | Effort | | Catch | | Effort | | Catch | | Effort | | Catch | |
| | | Days | Hours | | | Days | Hours | | | Days | Hours | | | Days | Hours | | |
| 1975 | 3L | - | - | - | - | - | - | - | - | 2 | 11 | 85 | 2 | 11 | 85 | | |
| | 3N | - | - | - | 32 | 334 | 1622 | 12 | 90 | 626 | 44 | 424 | 2248 | | | | |
| | 30 | - | - | - | 11 | 151 | 486 | - | - | - | - | 11 | 151 | 486 | | | |
| | 3LN0 | - | - | - | 43 | 484 | 2108 | 14 | 101 | 711 | 57 | 585 | 2819 | | | | |
| 1976* | 2J | - | - | - | - | - | - | - | - | 1 | 13 | 19 | 1 | 13 | 19 | | |
| | 3K | - | - | - | - | - | - | - | - | 2 | 14 | 32 | 2 | 14 | 32 | | |
| | 2J+3K | - | - | - | - | - | - | - | - | 3 | 27 | 51 | 3 | 27 | 51 | | |
| | 3L | 3 | 23 | 27 | - | - | - | - | - | - | - | - | 3 | 23 | 27 | | |
| | 3N | 2 | 11 | 29 | 174 | 2426 | 1701 | 107 | 1294 | 1302 | 283 | 3730 | 3032 | | | | |
| | 30 | 32 | 359 | 367 | 123 | 1630 | 1563 | 4 | 28 | 43 | 159 | 2017 | 1973 | | | | |
| | 3P | 3 | 6 | 29 | - | - | - | - | - | - | - | 3 | 6 | 29 | | | |
| | 3LN0P | 40 | 398 | 451 | 297 | 4055 | 3264 | 111 | 1321 | 1345 | 448 | 5762 | 5060 | | | | |
| Total | | 40 | 398 | 451 | 297 | 4055 | 3264 | 114 | 1348 | 1396 | 451 | 5801 | 5111 | | | | |

Table 1. Continued.

| Year | Div. | June | | | July | | | Sept. | | | Oct. | | | Annual | | |
|--------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|------|
| | | Effort Days | Hours | Catch | Effort Days | Hours | |
| 1977* | 2J | - | - | - | - | - | - | 13 | 136 | 191 | 24 | 264 | 374 | 37 | 400 | 565 |
| | 3K | - | - | - | - | - | - | - | - | - | 23 | 273 | 306 | 23 | 273 | 306 |
| | 2J+3K | - | - | - | - | - | - | 13 | 136 | 191 | 47 | 537 | 680 | 60 | 673 | 871 |
| 3L | 5 | 38 | 80 | 10 | 88 | 131 | - | - | - | - | - | - | - | 15 | 126 | 212 |
| | 3N | 157 | 2300 | 3362 | 17 | 215 | 343 | - | - | - | - | - | - | 174 | 2516 | 3704 |
| | 3O | 18 | 183 | 36 | 1 | 2 | 5 | - | - | - | - | - | - | 19 | 185 | 41 |
| 3LN0 | 180 | 2521 | 3478 | 28 | 306 | 479 | - | - | - | - | - | - | - | 208 | 2827 | 3957 |
| | Total | 180 | 2521 | 3478 | 28 | 306 | 479 | 13 | 136 | 191 | 47 | 537 | 680 | 268 | 3500 | 4828 |
| | 3L | 67 | 653 | 124 | - | - | - | - | - | - | - | - | - | 67 | 653 | 124 |
| 1978** | 3N | 197 | 2351 | 659 | 13 | 122 | 3 | - | - | - | - | - | - | 210 | 2473 | 662 |
| | 3O | 34 | 162 | 2 | 16 | 129 | 2 | - | - | - | - | - | - | 50 | 291 | 3 |
| | 3LN0 | 298 | 3166 | 784 | 29 | 251 | 5 | - | - | - | - | - | - | 327 | 3417 | 789 |

* not including the greater part of male discarded.

** effort and catch in May are included into June.

Table 2. Japanese CPUE of capelin in tonnage class 2000-3000
GRT in Div. 3LNO.

| Month | Year | Effort | Catch | CPUE in tons | |
|-------|-------|--------|-------|--------------|------------|
| | | Days | Hours | in tons | /Day /Hour |
| June | 1975 | 43 | 484 | 2108 | 49.0 4.4 |
| | 1976* | 203 | 2599 | 2387 | 11.7 0.9 |
| | 1977* | 135 | 1876 | 2543 | 18.8 1.4 |
| | 1978 | 141 | 1478 | 304 | 2.2 0.2 |
| July | 1975 | 14 | 101 | 711 | 50.8 7.0 |
| | 1976* | 78 | 883 | 1086 | 13.9 1.2 |
| | 1977* | 20 | 252 | 467 | 23.4 1.9 |
| | 1978 | 16 | 122 | 4 | 0.3 0.0 |
| Total | 1975 | 57 | 585 | 2819 | 49.5 4.8 |
| | 1976* | 281 | 3482 | 3473 | 12.4 1.0 |
| | 1977* | 155 | 2128 | 3010 | 19.4 1.4 |
| | 1978 | 157 | 1600 | 307 | 2.0 0.2 |

* not including the greater part of male discarded.

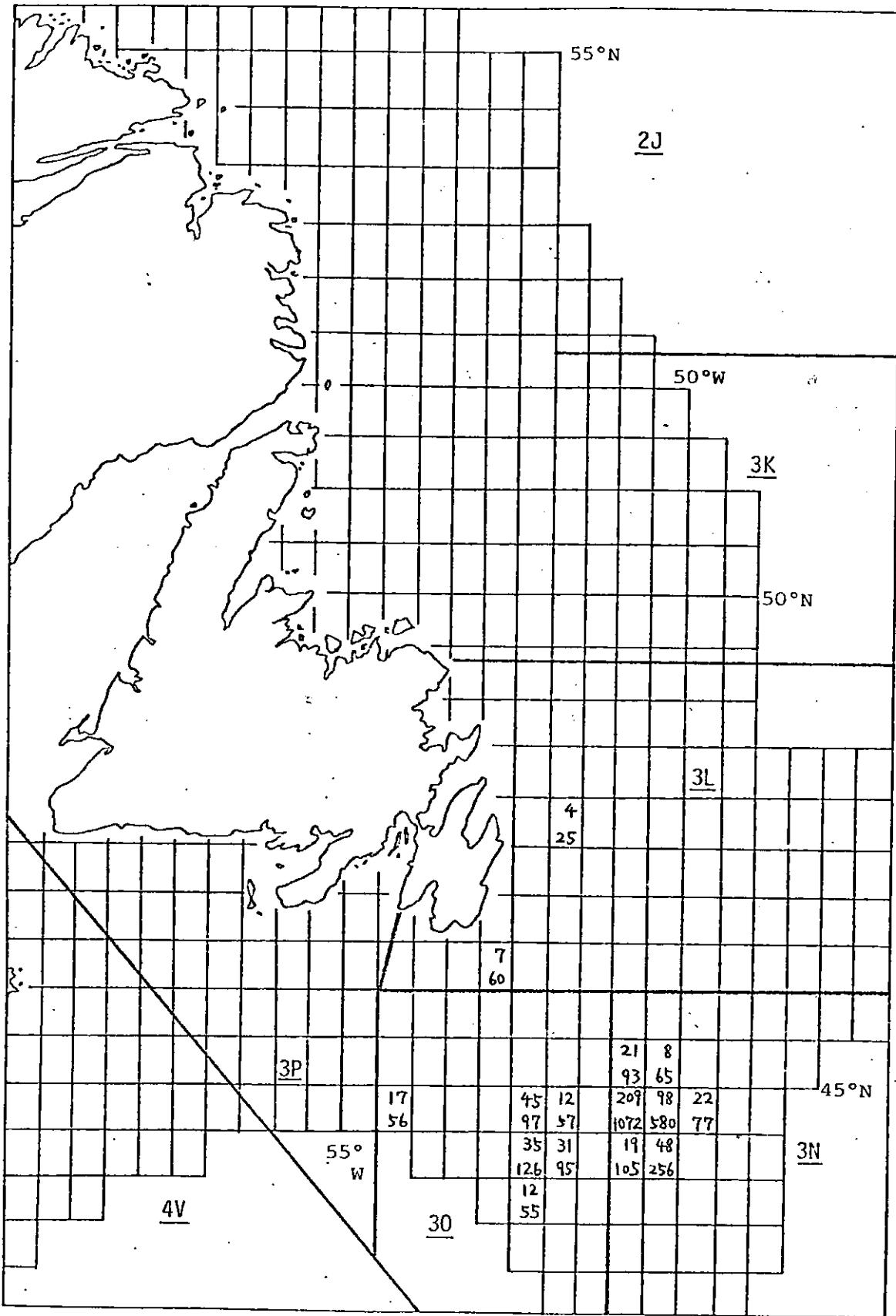


Fig. 1. Japanese fishing effort in hours hauled (upper) and capelin catch in tons (lower) by statistical block in 1975.

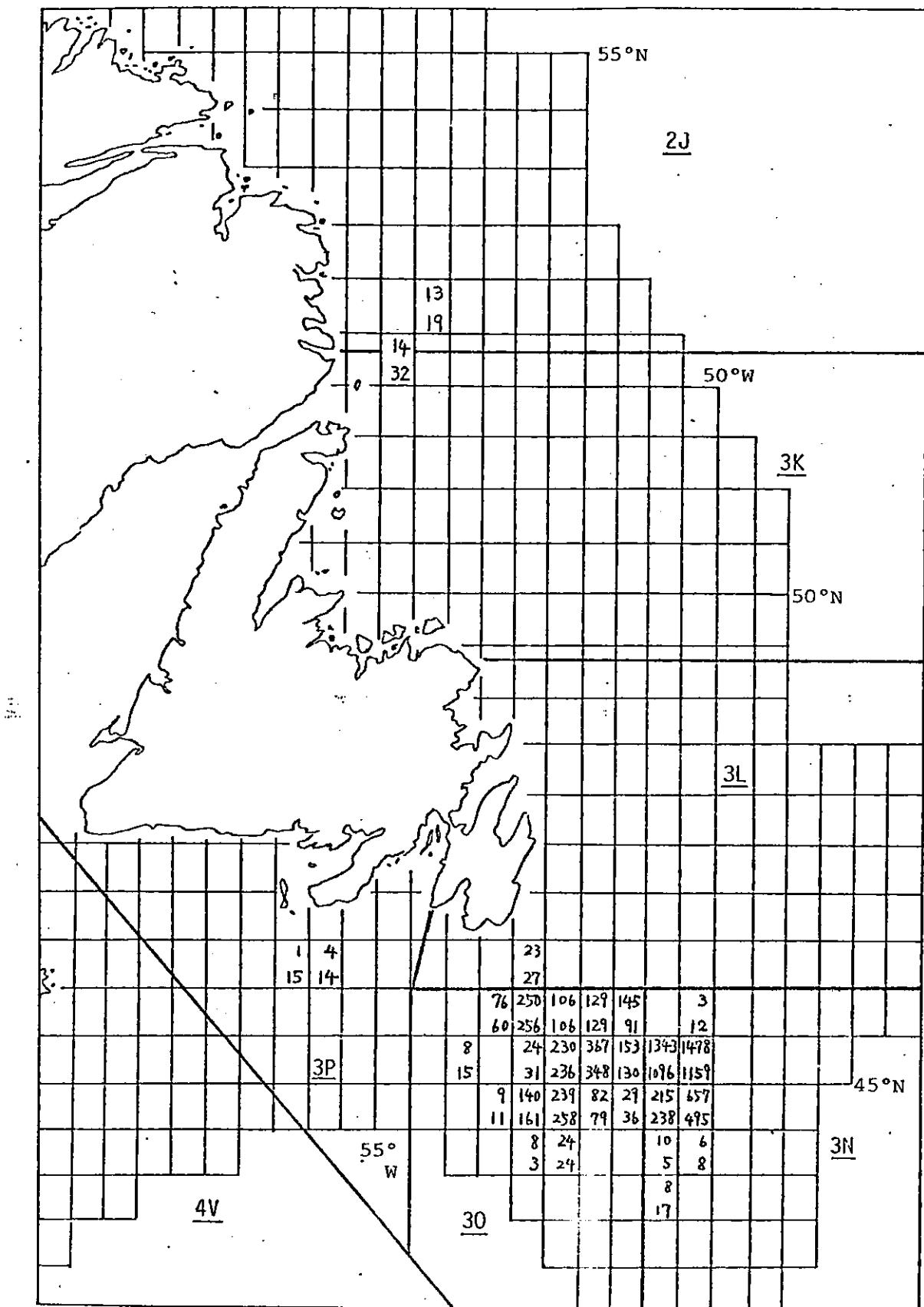


Fig. 2. Japanese fishing effort in hours hauled (upper) and capelin catch in tons (lower) by statistical block in 1976.

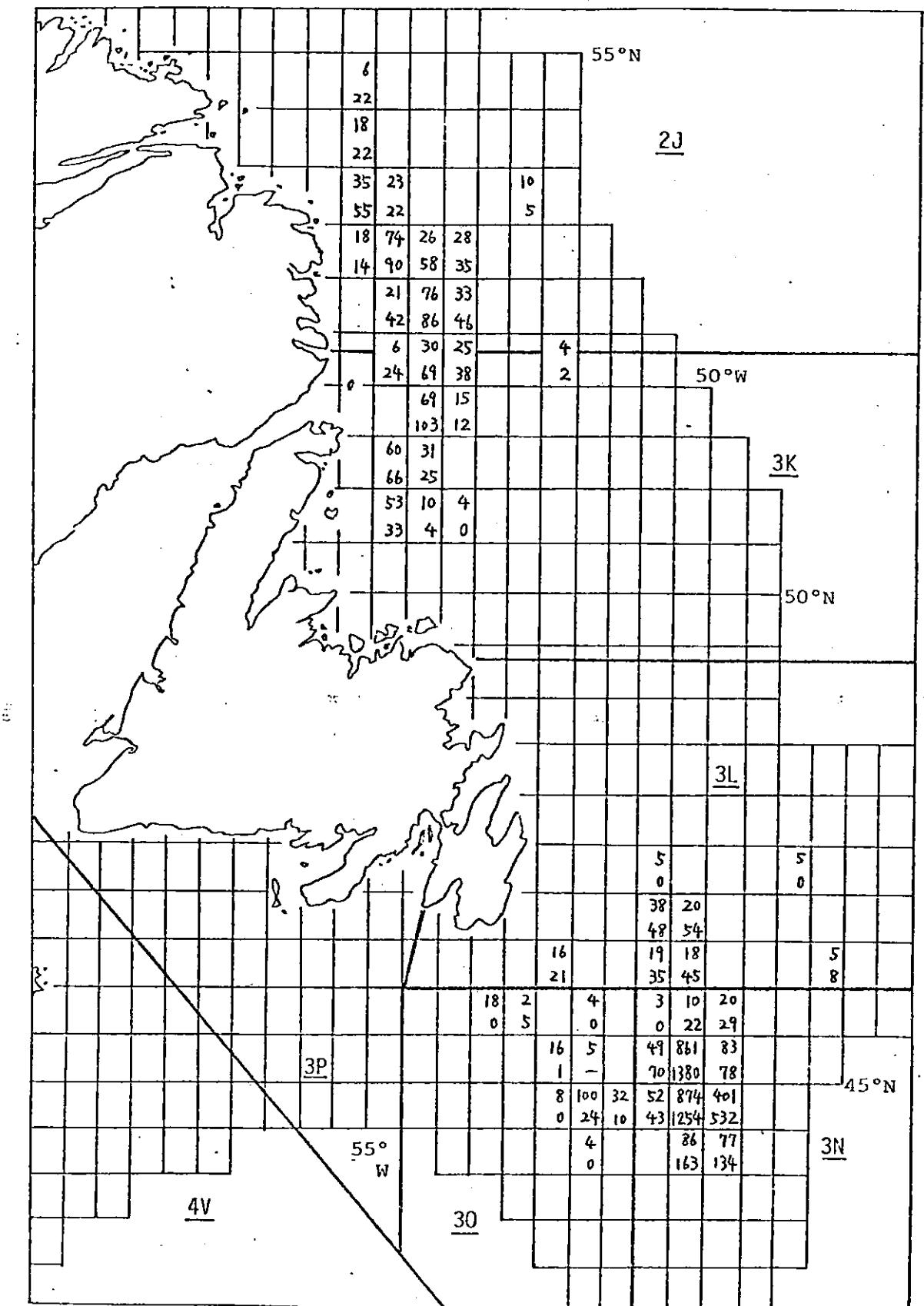


Fig. 3. Japanese fishing effort in hours hauled (upper) and capelin catch in tons (lower) by statistical block in 1977.

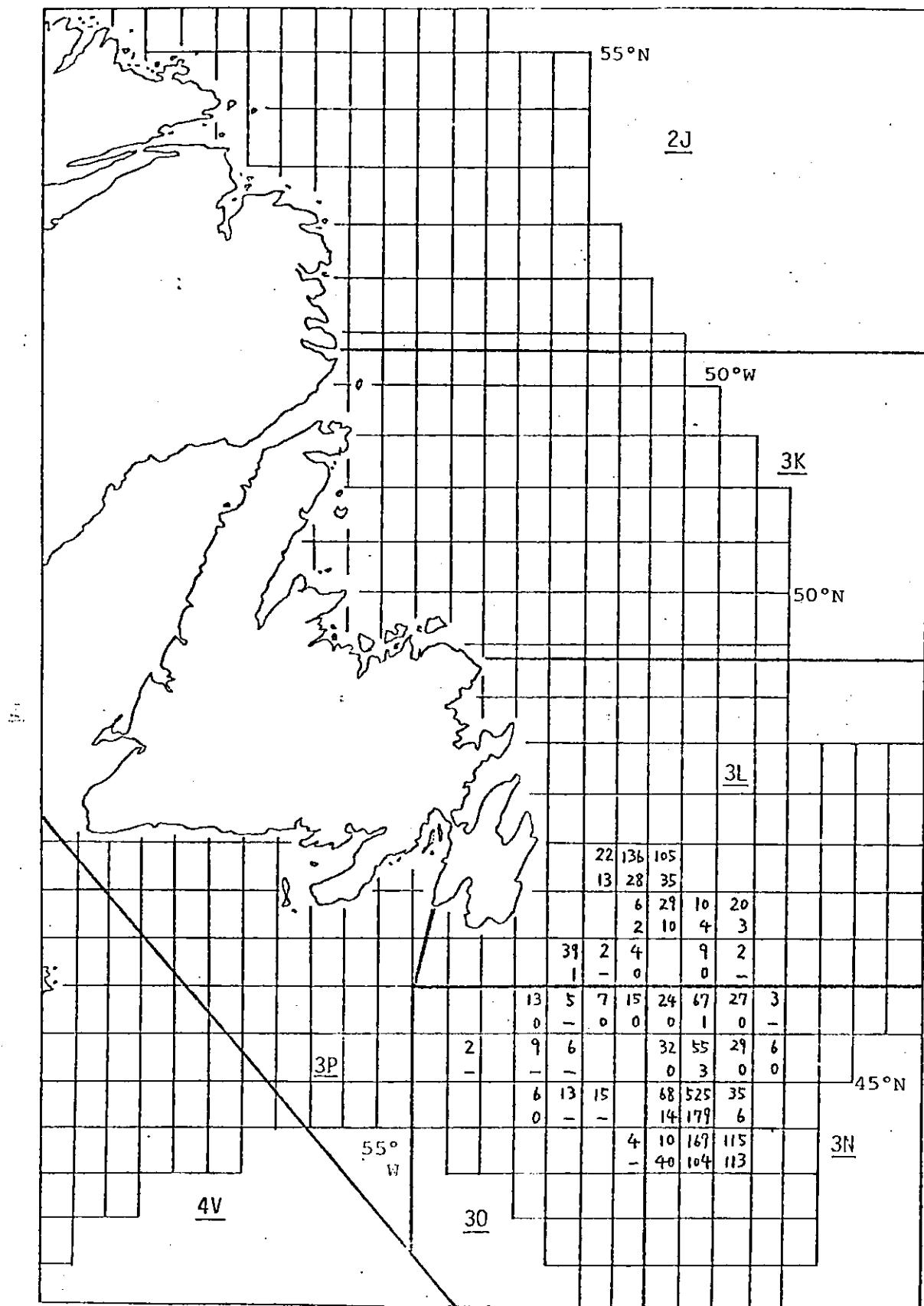


Fig. 4. Japanese fishing effort in hours hauled (upper) and capelin catch in tons (lower) by statistical block in 1978. The values are not census in this year.