# ANNUAL MEETING - JUNE, 1963 

# SPANISH RESEARCH REPORT <br> PART A <br> Size Distribution of Cod, 1962 <br> by 0. Rodriguez Martin 

As in previous years, an observer has collected data aboard the trawler "Aquilón", mainly for the study of age and length distribution of cod.

The material ${ }^{(1)}$ collected for each month and ICNAF division includes the following numbers of cod measured:

| Month | 1B | 1 C | 2 J | 3K | 3 L | 3M | 30 | 3PS | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| March |  |  |  |  |  |  |  | 316 | 316 |
| April |  |  |  |  | 159 |  |  |  | 159 |
| May |  |  | 2,799 |  |  |  |  |  | 2,799 |
| July |  |  |  |  | 1,501 | 461 | 446 |  | 2,408 |
| Aug. | 627 | 204 | 1,037 |  |  |  |  |  | 1,868 |
| Sept. |  |  | 526 |  |  |  |  |  | 526 |
| Oct. |  |  | 530 | 616 |  |  |  |  | 1,146 |
| Nov. |  |  |  | 57 |  |  |  |  | 57 |
| Year | 627 | 204 | 4,892 | 673 | 1,660 | 461 | 446 | 316 | 9,279 |

## Division 1B (FigeI)

The most frequent sizes (mode of the length distribution curves) caught in the month of August were $54-56 \mathrm{~cm}$ and $66-68 \mathrm{~cm}$. Maximum length was 80 cm , and minimum length 40 cm .

## Division 1C (Fig. 1)

The mode was $66-68 \mathrm{~cm}$, being the maximum length found 98 cm and the minimum length 45 cm .

Fig. 1 shows that lengths are generally higher in Division $1 C$ than in 1 A .

1) Tables of detailed data will be included in the 1962 Sampling Yearbook. .

## Division 2J (Fig. 2)

Data from four months is available in this subarea, as shown hereof:
a) March: The mode was 57-59 cm and lengths are up to 86 cm , with a minimum of 35 cm . Specimens up to 100 cm were also caught, but in small proportion.
b) August: Two well marked modes are found, one at 48-50 cm and the other at $60-62 \mathrm{~cm}$. The maximum length was 83 cm , and the minimum length 32 cm.
c) Sept.: The mode was $51-53 \mathrm{~cm}$, with a maximum length of 84 cm and a minimum of 35 cm .
d) Oct.: The mode was $48-50 \mathrm{~cm}$; maximum length 70 cm and minimum length 36 cm .

## Division 3K (Fig. 3)

a) Oct.: The mode was $60-62 \mathrm{~cm}$; maximum length found $92 \mathrm{~cm} ;$ minimum length found 35 cm .
b) Nov.: The mode is $72-74 \mathrm{~cm}$ and sizes go from 48 cm (the smallest) to 100 cm .

## Division 3L (Fig. 4)

a) April: The mode was $60-62 \mathrm{~cm}$, being the maximum length 83 cm and the minimum length 42 cm . Some specimens had a total length of 92 cm .
b) July: The mode was $51-53 \mathrm{~cm}$, the minimum length 35 cm and the maximum length 89 cm . Some specimens sized 107 cm were also caught.

## Division 3M (Fig. 5)

July: The mode was $63-65 \mathrm{~cm}$; maximum length 107 cm and minimum length 44 cm .

## Division 30 (Fig. 5)

July: The mode was $48-50 \mathrm{~cm}$; maximum length 66 cm and minimum length 40 cm .

Division 3PS (Fig. 5)
March: The length curve shows two peaks, one at $51-53 \mathrm{~cm}$ and the other at $60-62 \mathrm{~cm}$, being the maximum length 98 cm and the minimum length 38 cm . There are some specimens sized 107 cm 。

The data presented above are summarized in the following
table:

| $\begin{aligned} & \text { ICNAF } \\ & \text { Division } \end{aligned}$ | Month | Mode cm | Maximum <br> cm | $\begin{gathered} \text { Minimum } \\ \mathrm{cm} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 A | August | $\begin{aligned} & 54=56 \\ & 66-68 \end{aligned}$ | 80 | 40 |
| ${ }_{1}^{10}$ | 11 | 66-68 | 9886 | 45 |
|  | May | 57-59 |  | 35 |
|  | August | 60-62 | 83 | 32 |
|  | September | $51-53$ | 89 | 35 |
|  | October | 48-50 | 70 |  |
| 3K | October | $60-62$ $72-74$ | 92 | 35 |
|  | November | 72-74 | 100 | 42 |
| 3L | April | $60-62$ $57-53$ | 83 89 |  |
|  | July | 63-65 | 89 107 | 35 |
| 3 M 30 | July | 48-50 | 66 | 40 |
| 3PS | March | $\begin{aligned} & 51-53 \\ & 60-62 \end{aligned}$ | 98 | 38 |



Figure 1.



Figure 2.


Figure 3.


Figure 4.


$$
\begin{aligned}
& \text { Length } \mathrm{cm} \text {. }
\end{aligned}
$$

Figure 5.

