



NAFO/ICES PANDALUS ASSESSMENT GROUP—OCTOBER 2012

The Spanish Shrimp Fishery on NAFO area (Division 3L) in 2011

by

J. M. Casas

Instituto Español de Oceanografía, P.O. Box 1552, Vigo, Spain

e-mail: mikel.casas@vi.ieo.es

Abstract

This paper shows data about catch, effort, catch per unit effort (CPUE) and size distributions of shrimp (*Pandalus borealis*) for Spanish commercial fishery in NAFO Divisions 3L in 2011. From 2011 the shrimp fisheries on Flemish Cap (NAFO Div. 3M) is in moratorium and no effort is directed to this stock.

Material and Methods

The information concerning to the Spanish shrimp fishery in Division 3L was taken from data collected from the STATLANT (landings) and the UE observers on board in the Spanish vessels (monthly landings, effort, bycatch and discards). Also, one Spanish scientific observer for the Spanish Scientific Program (IEO) were on board during the fishing period directed to shrimp, providing information about fishing activity and carrying out biological sampling (length distributions).

Results

The annual catches according to Statlant 21A were 292 t in NAFO Div. 3L. In Div 3L the catches were carried out in January. The hauls were carried out in Division 3L at depths between 249 and 524 m. (136-286 fth.). Practically the total effort (97% fishing hours) was carried out in depths lower than 400 m. (219 fth.). (Figure 1)

The Table 1 shows the catches and yields of shrimp from the UE observers, together with the distribution of effort (number of days and hours of activity estimated) and the CPUE (kg/h).

The Table 2 shows the shrimp length distribution by sexes from the sampled vessel by Spanish scientific observed. The length distributions from Division 3L carried out from January showed a sex-ratio around to 42.5% and 57.5 for males and females respectively.

Next to 10% of total Spanish shrimp catches were observed and sampled by Spanish scientific observers and therefore the length frequencies can be considered representative of Spanish fleet activities carried out in January (Figure 2). Lengths from samples taken by observer consisted of a broad size range of males and females. The modes from males were around 17.5 and 20 mm, these animals were probably 3 and 4 years old. The female length frequency distributions were also broad and showed two modes around 22 mm and 24.5 mm. These modal lengths would correspond roughly with the ages 5 and 6.

Table 1.- Catches (kg), effort and CPUE (kg/h) from Statlandt 21A and UE observers of the Spanish trawl fleet directed to shrimp fishery in NAFO Div. 3L 2011.

Species	
Northern shrimp	292 t.
Vessel numbers	6
Fishing hours	516
CPUE Shrimp (kg/h)	566

Table 2: Shrimp length distributions by month and sex from Spanish catches in NAFO Divisions 3L, 2011.

Divisions	3L	
Months	January	
C.L. (mm)	males	females
15	7657	0
15.5	9271	0
16	13776	0
16.5	36232	0
17	80031	0
17.5	144312	0
18	107793	0
18.5	99989	0
19	149429	4226
19.5	205459	6292
20	244361	12518
20.5	256640	54019
21	165082	148982
21.5	173348	298383
22	44171	352251
22.5	13924	290591
23	2520	304000
23.5	0	219801
24	0	151761
24.5	0	192666
25	0	96310
25.5	0	77824
26	0	70834
26.5	0	43493
27	0	29134
27.5	0	9345
28	0	4428
28.5	0	0
29	0	2910
TOTAL	1753995	2369768
Sex ratio	42.5%	57.5%
Sampled catch	25743 kg	
Sampled tows	9	
Ind. measured	1492	

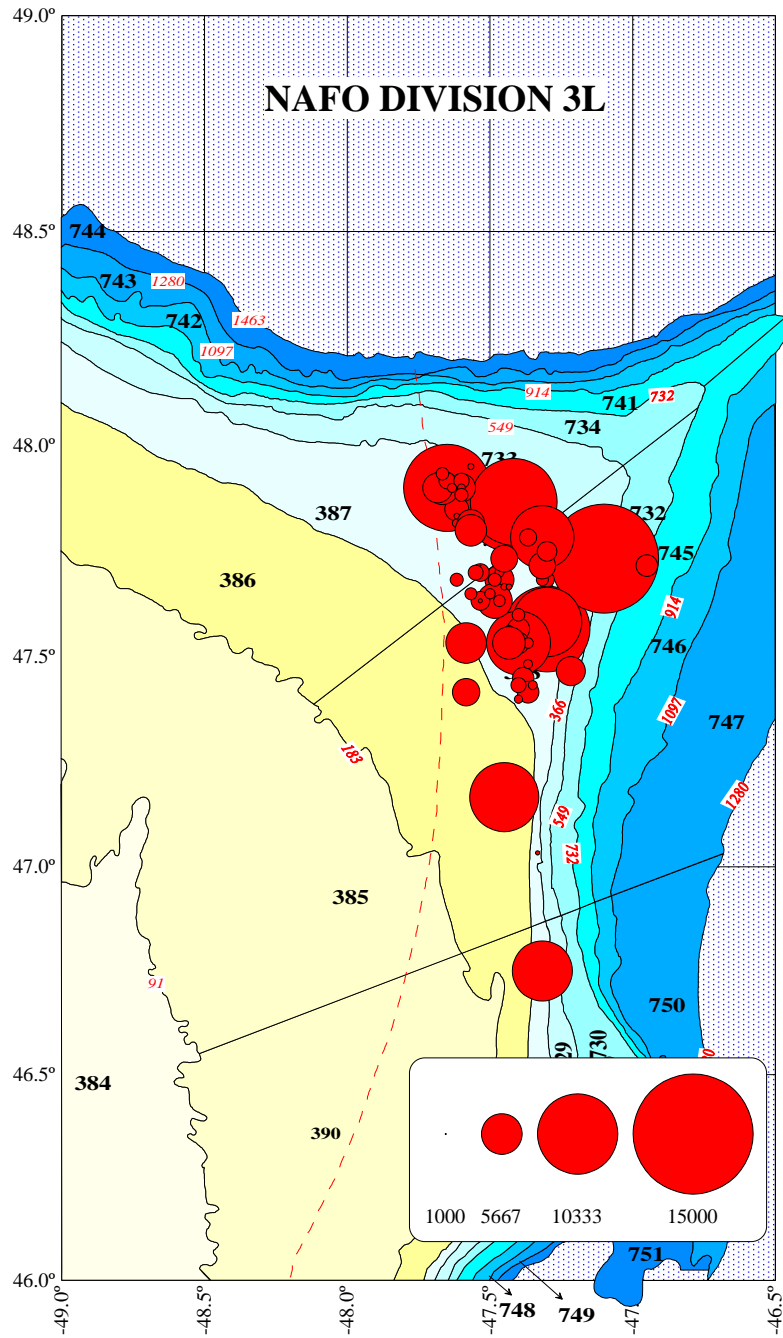


Figure 1.- Geographical location and distribution of Spanish catches (kg) in NAFO Div. 3L in 2011. Depth labels in fathoms.

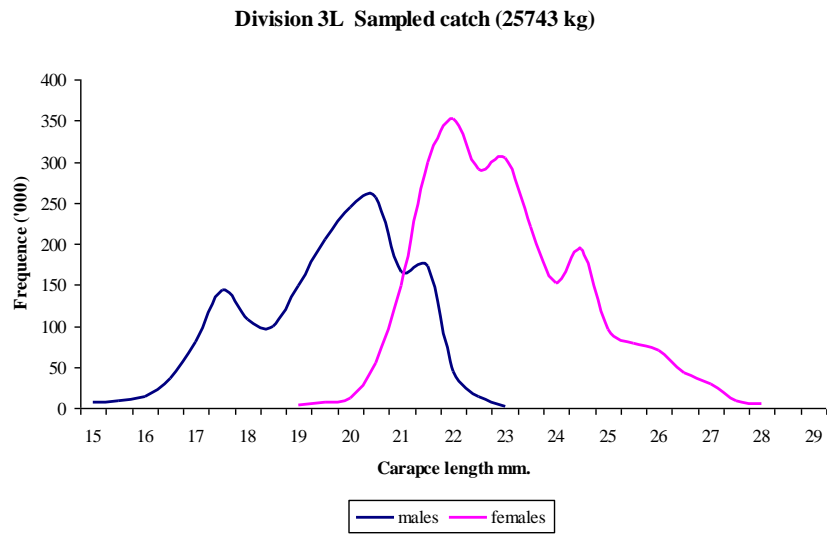


Figure 2.- Size distribution (carapace lengths) of shrimp by sex from Spanish commercial catches sampled in NAFO Division 3L in 2011.