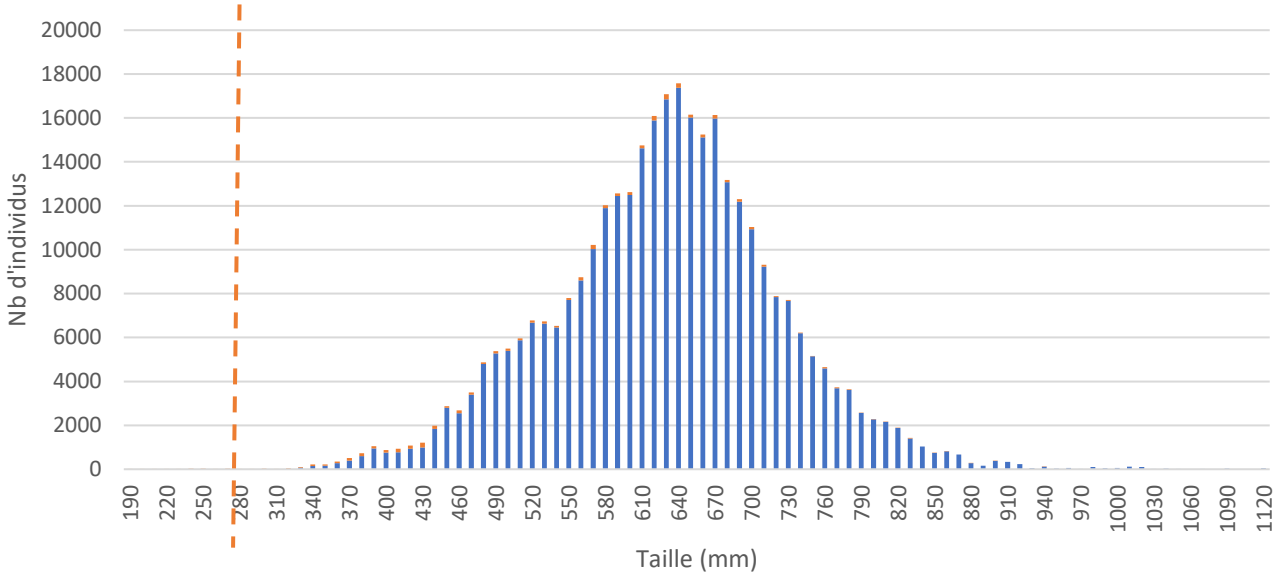
100mm / 120 mm for the hake-netters in VII : What's the best?

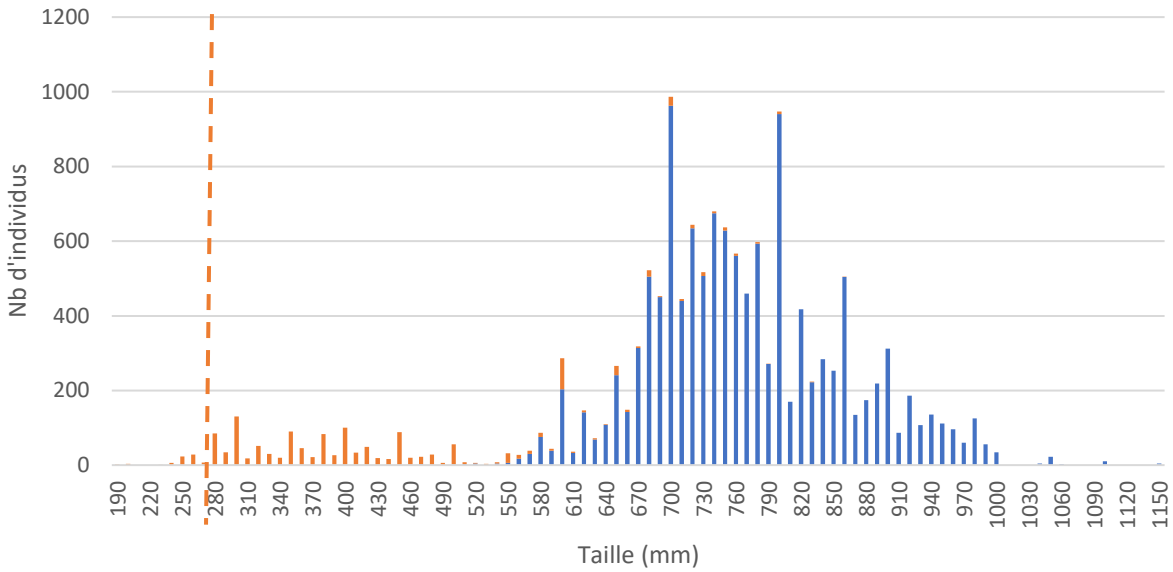
Preliminary considerations

NWW AC WG CS - 5/07/2021

100 mm – ICES VII



120 mm – ICES VII



It’s ok, when fishing with 120mm, the average length is higher (75 cm) Vs using 100mm (65 cm)

But :

- In both cases, very few discards < MCRS
- In proportion, far more juveniles caught with 120mm

Considerations for the optimal exploitation pattern of Hake

*Global First maturity : L_{50} = 42,85 cm (ICES) – sex and time variable

* Sex Ratio :

Sex was recorded for 4,273 of the sampled hake. The proportion female at each cm interval is shown in Figure 32. There was considerable variation in the proportion female at each cm between 21 and 70cm, after which the proportion female showed a steady increase from around 0.6 to 0.9 between 70 and 90 cm (Macdonald et *Al*., 2013)

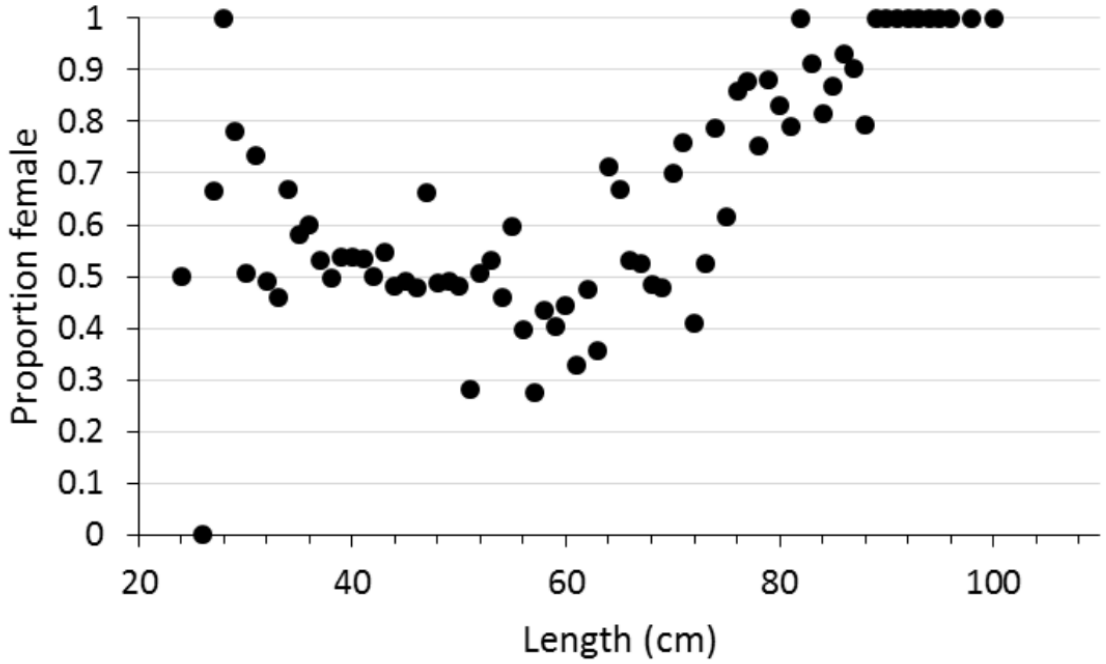
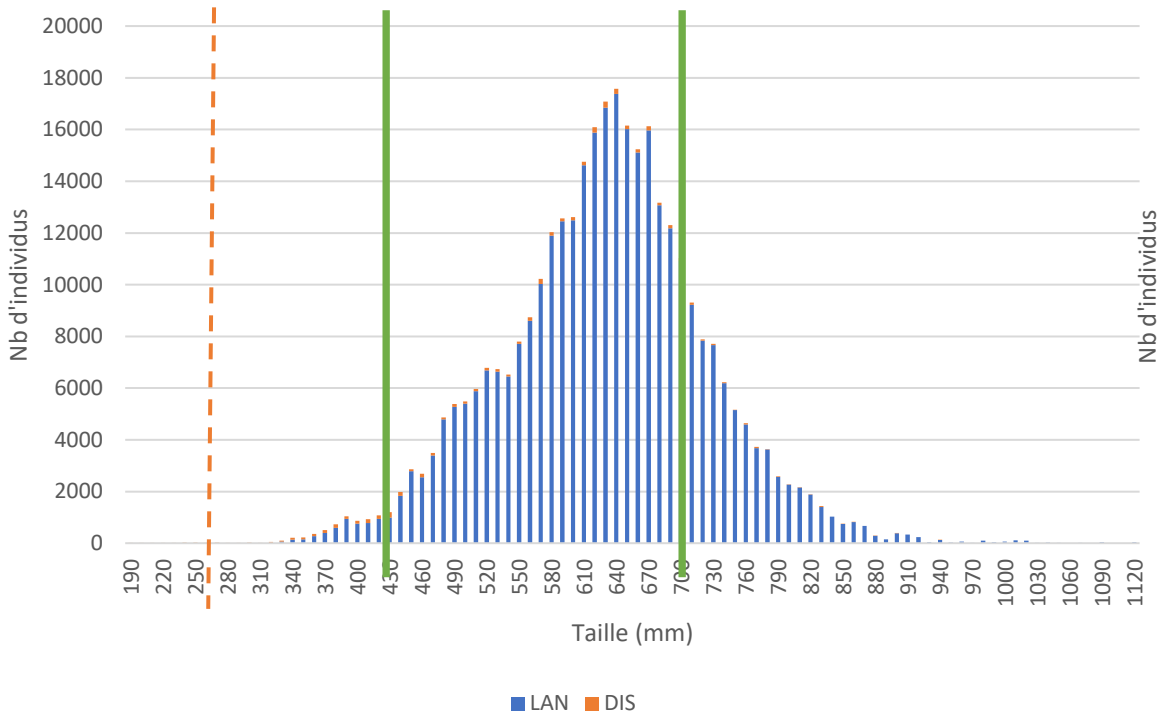
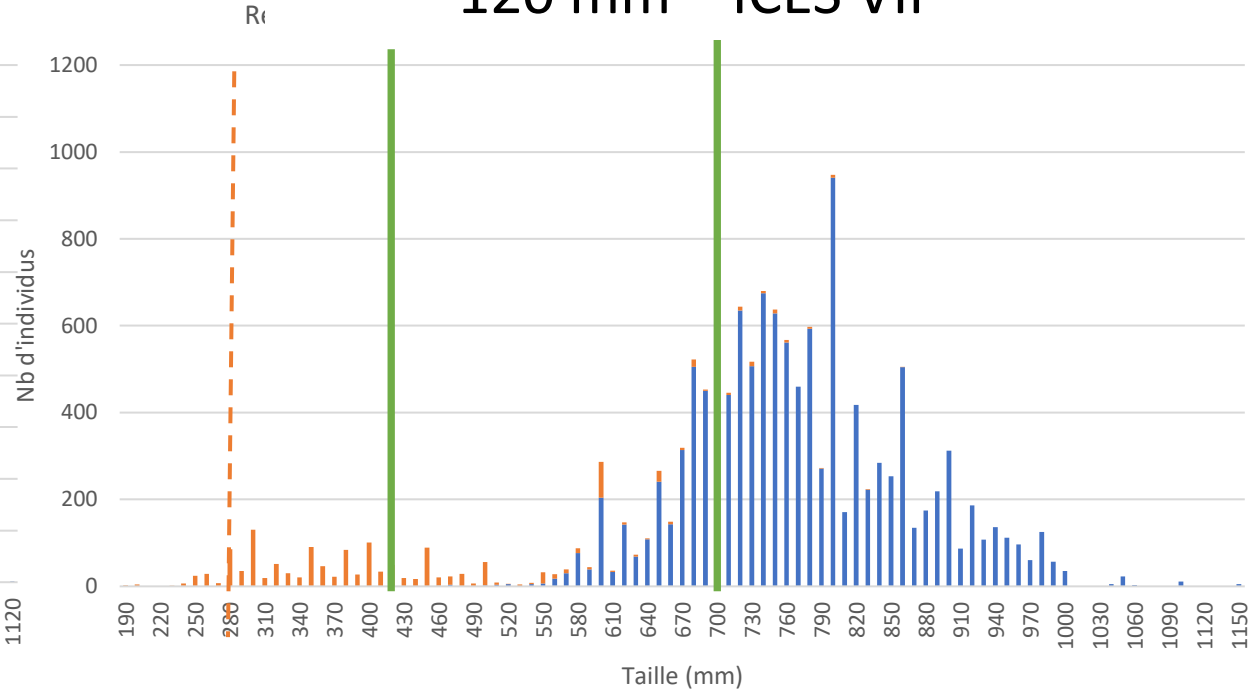


Figure 32 Proportion of female hake at each cm length interval (n=4,273).

100 mm – ICES VII



120 mm – ICES VII



100mm is far more efficient regarding both the proportion of juveniles caught, and a balanced exploitation regarding the sex ratio..

What about bycatches?

BIM, 2011

Table 5. Species catch data

Mesh Size	80mm	100mm	120mm	140mm
Species	kg	kg	kg	kg
Black Pollack	70.9	42.85	29.7	43.9
Blue shark	0	0	50	0
Cod	63.4	75.45	90.35	59.8
Gurnard spp	15.8	11.75	0	17.55

Table 6. Species catch data for Type A 100mm and Type B 120mm industry standard gillnets

Mesh Size	Type A 100mm	Type B 120mm
Species	kg	kg
Hake Percentage	76%	65%

100mm allows a much more directed hake-fishing, and then limits bycatches (cod…) compared to 120mm

Final Preliminary Comments

- The optimisation of the Hake-netters exploitation is far more complex than a simple identification of the mesh size that produces the highest average length
- Having considered additional parameters, 100 mm appears to be a better regulatory mesh size, which then should apply everywhere in ICES VII
- Further details regarding the articulation between the TM Regulation and the 494/2002 Regulation are needed