

Fishery Report: *Dissostichus eleginoides* Kerguelen Islands inside French EEZ (Division 58.5.1)

5.176 Insufficient information was available at the meeting to complete a Fishery Report for this fishery. The Working Group recommended that French scientists be requested to provide the information required during the coming intersessional period.

Standardisation of CPUE

5.177 Haul-by-haul catch and effort data for the French longline fishery inside the French EEZ in Division 58.5.1 (fine-scale data) for the 1998/99 to 2003/04 fishing seasons were examined. These data had been kindly provided by Prof. G. Duhamel (France). GLMMs and LMMs as described in Candy (2004) and WG-FSA-03/34 were used to investigate trends in CPUE (kg/hook) and average weight of caught fish (kg) respectively.

5.178 Figure 5.15 shows the standardised CPUE series for 1998/99 to 2003/04, along with estimated total removals for the period 1995/96 to 2003/04. There is a general decreasing trend in the standardised CPUE.

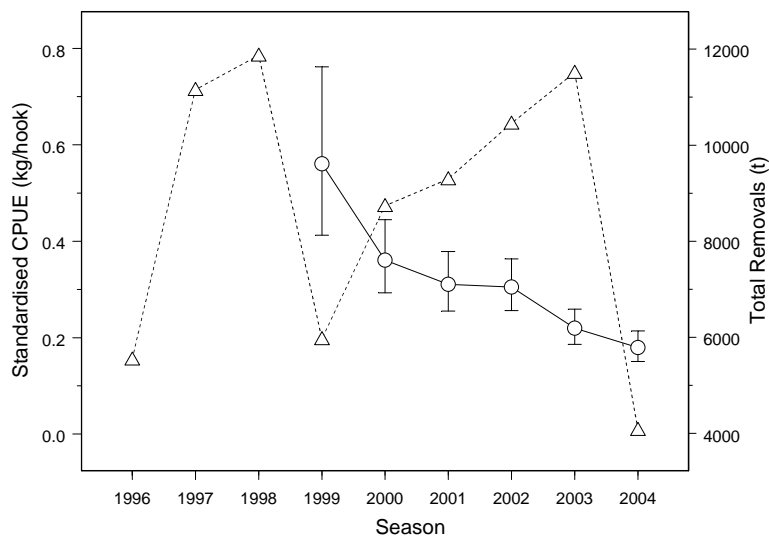


Figure 5.15: Time series of both total removals (dashed line) and standardised CPUE (solid line) obtained from the fitted GLMM. Error bars represent approximate 95% confidence bounds on the estimates.

5.179 With regard to total removals, the Working Group had noted last year that there had been a dramatic increase in total removals since 1998/99. The estimated total removals for 2003/04 are substantially lower than those in 2002/03 (from 11 511 to 4 079 tonnes). Most of this reduction resulted from a lowering of estimated IUU catch from 7 825 tonnes in 2002/03 to 643 tonnes in 2003/04.

5.180 Figure 5.16 shows the corresponding series of standardised average weights in the catch. The decrease in the standardised average weight probably indicates that the older age classes are becoming less numerous in the exploited stock.

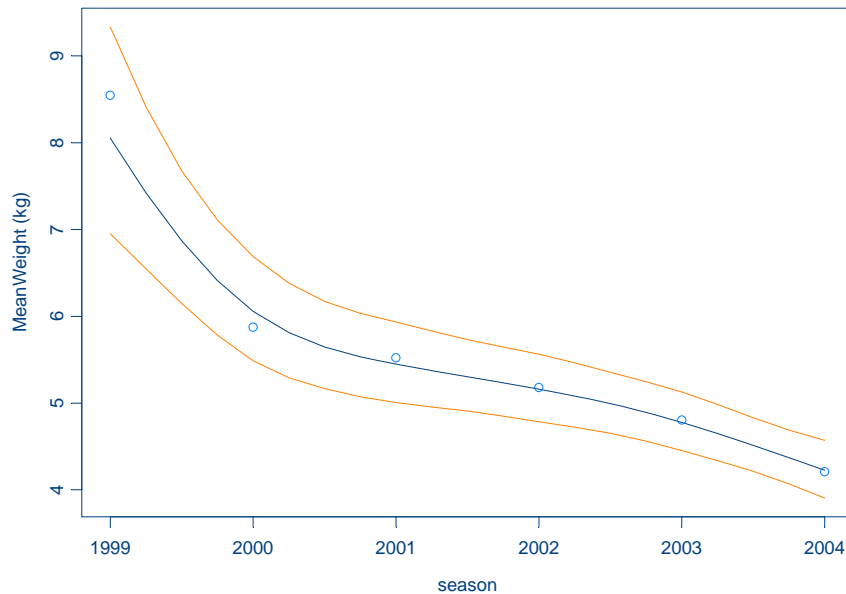


Figure 5.16: Time series of standardised average weight (kg) obtained from the LMM fitted to $\log(\text{average weight})$ using a cubic smoothing spline. Error bounds represent approximate 95% confidence bounds on the estimates.

Management advice

5.181 Last year, the Working Group had agreed that it is imperative that steps be taken to substantially reduce total removals from 2002/03 levels. The Working Group welcomed the substantial reduction that had been achieved in 2003/04, but noted that in the absence of a stock assessment it is not possible to determine whether this reduction in catches, if sustained, would allow the declining trends in standardised CPUE or mean lengths to be halted or reversed.

5.182 As for other toothfish fisheries in the CCAMLR Convention Area, the Working Group recommended that tag-recapture experiments be conducted. It also noted that the carrying out of a recruitment survey in the Kerguelen area would be very beneficial for a fuller assessment of toothfish stocks on the Kerguelen Plateau.

5.183 No new information was available on the state of fish stocks in Division 58.5.1 outside areas of national jurisdiction. The Working Group therefore recommended that the prohibition of directed fishing for *D. eleginoides* described in Conservation Measure 32-13 remains in force.