# International Commission for 

# the Northwest Atlantic Fisheries 

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Note of the People's Republic of Bulgaria, the German Democratic Republic, the People's Republic of Poland and the USSR Commissioners
in relation to the estimation of the 1977 TAC for mackerel
in the ICNAF Convention Area

The Bulgarian, GDR, Polish and USSR Commissioners draw the Commission's attention to the STACRES recommendation to set the 1977 TAC for mackerel in the ICNAF Convention Area at the range of 0 up to 250,000 tons. The STACRES advice for the zero quota level is based on the results of groundfish trawl surveys conducted by the US scientists in the spring of the current year. The trawl surveys method is based on samples taken at random and requires an equal distribution of the objects under study to which groundfish belong. Meanwhile, it is established that distribution of mackerel is extremely unequal and in this view, samples taken at random may apparently indicate only the trend towards the increase or decline of the stock. The trawl used during those surveys is of a very small size (vertical opening is $2-2.5 \mathrm{~m}$ ) and thus failed to be used for reliable estimation of mackerel abundance because it is very well known that, for the most part of its life cycle, mackerel inhabit a pelagic layer. In previous years, STACRES consistently made its assessments taking into account the above-mentioned peculiarities of the distribution of mackerel. The Bulgarian, GDR, Polish and USSR Commissioners also draw attention of the Commission to the fact that the mackerel stock assessment for 1977 carried out on the basis of the said surveys was at such a low level in comparison with the expected total actual mackerel catch for 1976 (310,000-ton quota level or slightly less), that this stock catch would have to comprise $64-90 \%$ of the mackerel spawning stock which obviously could not be considered by us as a scientific approach for taking up this problem. The Bulgarian, GDR, Polish and USSR fishing vessels have been taking almost $100 \%$ of the total catch of mackerel in the ICNAF Convention Area and it goes without saying that these countries are among the first which are interested in rational and scientific utilization of the mackerel resources.

For the mackerel stock assessment, the Bulgarian, GDR, Polish and USSR scientists use the commercial catch data as these, to a far greater extent, take into account the peculiarities of the distribution of mackerel. During 1976 a slight decrease of the USSR yield-per-unit-effort was observed; the Bulgarian and Polish catch-per-uniteffort were at the 1975 level. At the same time, the GDR catch-per-unit-effort is slightly increased. The assumption of the US scientists on the sharp decline of the mackerel stock would have to be followed by an increase in fishing effort by several times, in comparison with 1975 because Bulgaria, GDR, Poland and USSR would not be able to take the mackerel quotas allocated to them. But as a matter of fact, as it was menticned above, this had not taken place.

The assessments carried out on the basis of commercial catch data for 1976
indicate that the mackerel total allowable catch for 1976 may be 250,000 tons without inflicting any damage to the state of the stock. The Bulgarian, GDR, Polish and USSR scientists consider this TAC can still be a conservative one.

Taking into account that, according to the past ICNAF practice, the mackerel total allowable catch has always been estimated on the basis of commercial catch data and that scientific evidence of this method had been proven by long-term practice and that the utilization of groundfish trawl surveys for assessment of the pelagic species requires sound scientific background, the Bulgarian, GDR, Polish and USSR Commissioners consider that the Commission:

1) while setting a total allowable catch of mackerel for 1977 has to proceed, as it was in the past, from the advice based on the analysis of the commercial catch data;
2) to ask STACRES to submit to the next ICNAF Annual Meeting (June 1977) its conclusion on the utilization of groundfish trawl surveys for assessment of the stocks of pelagic species.
