

processed gelatin (also first extraction), were examined by the method of light scattering for M_w , and by the Sanger end-group technique for C_n (the number-average chain-length). The results for the alkali-processed material are given in Table 1.

Fraction	M_w	C_n
2	270,000	55,000
3	142,000	70,000
4	74,000	70,000
5	57,000	70,000

If the gelatin molecule consisted of a single polypeptide chain, it would be expected that M_w and C_n would only differ slightly, owing to imperfect fractionation. The very large differences observed may be interpreted as indicating that the gelatin molecules of higher molecular weight are composed of some half a dozen chains covalently linked in some way. It seems likely that these linkages have their origin in the collagen and are not produced in the conversion of collagen to gelatin.

Refractionation has been used to show that the extreme heterodispersivity needed to account for the results, if C was identical with M , is not the cause of the discrepancy. An examination of the F.D.N.B. reaction in the light-scattering cell has shown that the conditions used do not cause marked degradation while the reaction is in progress. There is, on the contrary, some indication of a cross-linking reaction. This would not interfere with the determination of the α -amino-groups.

Somewhat similar results to those with the alkali-processed gelatin were obtained with the acid-processed gelatin fractions. The situation was complicated by an indication that, at least for the lower molecular weights, the chains did not always terminate in an α -amino-group at one end.

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¹ Sanger, F., *Biochem. J.*, **39**, 507 (1945).

² Anderson, A. J., and MacLagan, N. F., *Biochem. J.*, **56**, xxv (1954).

³ Stainsby, G., *Nature*, **177**, 745 (1956).

INTERNATIONAL WHALING COMMISSION

EIGHTH ANNUAL MEETING

THE eighth annual meeting of the International Whaling Commission was held in London during July 16–20, all the seventeen contracting Governments, with the exception of Brazil, being represented. They were: Australia, Canada, Denmark, France, Great Britain, Iceland, Japan, Mexico, the Netherlands, New Zealand, Norway, Panama, South Africa, Sweden, the U.S.S.R. and the United States. Italy and Portugal were represented by observers, as were also the Food and Agriculture Organization of the United Nations, the International Council for the Exploration of the Sea and the International Association of Whaling Companies. Dr. G. J. Lienesch (Netherlands), chairman of the Commission, presided.

According to the figures compiled by the Bureau of International Whaling Statistics at Sandefjord, nineteen factory ships with 257 catchers were engaged during the 1955–56 Antarctic season, and the total catch by floating factories increased from 2,061,789 barrels to 2,134,012 barrels inclusive of sperm oil; there are six barrels to the ton, and the average price for whale oil is £70–80 per ton. The chief object of

the Commission is to arrange a balance between killing- and replacement-rates of the whale populations, and to achieve this it sets limits upon the total catch. The limit takes into consideration the views of scientists upon the size of the stocks of whales and of the whalers on the economics of the industry, the scientific opinion being almost unanimously in favour of a substantial reduction in the catch on account of evidence that the stock is declining. The existing limit is 15,000 blue whale units, and the Commission recommended that the catch for future seasons should not exceed this amount, and it further recommended (with one dissident) that the limit should be reduced during the coming 1956–57 season to 14,500 blue whale units.

Infractions of the whaling regulations during the past year were fewer than those of the previous year. At present every factory ship is required to have on board two inspectors who are generally of the same nationality as the flag of the ship. However, following the seventh meeting of the Commission in Moscow in 1955, the United States was asked to prepare a protocol for the amendment of the Convention so as to permit consideration of a scheme to appoint independent observers in addition to the national inspectors. All possible steps are now being taken to ensure that the protocol can be brought into force in time for the Commission to take action under its provisions at its ninth meeting, and it is hoped that the protocol will very soon be signed.

A statement of expenditure for the year ending May 31, 1956, amounting to £3,196, was approved by the Commission. For the current year due to end on May 31, 1957, the expenditure by the Commission is estimated at £2,935, and the contribution requested of each of the twelve contracting Governments remains at £150. £500 was set aside towards the cost of whale marking, which is the means of providing much of the essential scientific data on which the Commission's recommendations for the conservation of the whale stocks need to be based.

It was decided that a scientific sub-committee should again if necessary meet to consider certain scientific problems in anticipation of the next annual meeting, which will also be held in London, commencing on June 24, 1957.

THE B.B.C. AND ITS EXTERNAL SERVICES

A BOOKLET entitled "The B.B.C. and its External Services"*, describing the B.B.C.'s transmissions for listeners overseas, is of special interest at the present time in view of Sir John Glubb's recent convincing arguments that expenditure on the dissemination of ideas brings a higher dividend than expenditure on weapons. The booklet does not indicate what proportion of the B.B.C.'s income of £21 million from licence receipts (of which in 1955–56 the Government retained £2.75 million), £1 million from publications and £5.322 million from grants-in-aid was expended on external services; but these services in English and forty-three other languages are heard throughout the world, and occupy about eighty hours daily.

* The B.B.C. and its External Services. Pp. 32. (London: B.B.C. 1956.)