

INTERNATIONAL COMMISSION FOR



THE NORTHWEST ATLANTIC FISHERIES

Serial No. 3021
(G.a.)

ICNAF Summ.Doc. 73/23

ANNUAL MEETING - JUNE 1973

Trends in nominal catches by subarea and country for the
major fisheries of the Northwest Atlantic, 1952-71

by

Assistant Executive Secretary

Significant changes have occurred in the major commercial fisheries of the Northwest Atlantic during the 20-year period covered by ICNAF statistics up to 1971. Besides the gradual expansion of the traditional groundfish fisheries as some countries increased the size of their fishing fleets and others entered the fisheries for the first time, the 1952-71 period also witnessed the rapid development of fisheries on un-exploited pelagic and semi-pelagic fish stocks in the offshore regions of the southern part of the ICNAF Area. Consequently, by the late 1960's and early 1970's most of the major fishery resources of the Northwest Atlantic were being exploited at levels close to, and in some cases exceeding, their maximum sustainable yield. The long-term trends in landings for all species (finfish and shellfish), cod, haddock, redfish, silver hake, flounders, herring and mackerel are illustrated in Figures 1 to 8.

All Species

Total annual landings, even allowing for catches in Statistical Area 6 prior to 1966 (USA reported 640,000 tons from SA 6 in 1966), more than doubled between the early 1950's and 1968, when the peak landings reached 4.5 million tons (Fig. 1). The overall increase was a gradual one and occurred in all ICNAF Subareas. After 1968 there was a slight decline in the total landings with the most dramatic decreases occurring in Subareas 1 and 2.

Much of the increased yields was due to the development and expansion of fisheries by Federal Republic of Germany, Poland, Spain, USSR and Non-members (mainly GDR), most of which entered the Northwest Atlantic fishery after 1955. Also the Canadian catches in the late 1960's were about 50% higher than the 1952-60 level. USA landings, which did not vary much during the 1966-71 period, cannot be readily compared with those of 1952-65, as landings prior to 1966 do not include data on a substantial fishery by USA in Statistical Area 6. However, the pattern of increase in total landings is surprisingly regular, despite the great changes which have occurred in the landings of individual species.

Cod

The annual cod catches followed a trend similar to that for all species up to the peak catch in 1968, which was nearly twice the 1952-59 level of just less than one million tons (Fig. 2). Substantial changes occurred in 1960/61 and again in 1967/68 when catches increased by about 35% in each of the 2-year periods. However, between 1968 and 1971 there was a 40% decline over 3 years, the 1971 catch being only slightly higher than the relatively stable level of the 1950's. The greatest increases occurred in Subareas 2 and 3, followed by rapid declines in Subareas 1 and 2 after 1968.

The expansion of the cod fisheries in the 1960's was due largely to the increased fishing activity of Federal Republic of Germany, Poland, Spain, USSR and Non-members (mainly GDR). The Canadian, French and Portuguese cod catches which have remained relatively stable for most of the period, declined somewhat after 1968, as did also the catches of the other countries named in Fig. 2.

Haddock

The haddock fisheries have fluctuated greatly over the period, particularly in Subarea 3 where annual landings up to 100,000 tons were recorded in 1955 and 80,000 tons in 1961, after which the fishery declined to little more than a by-catch situation in the most recent years (Fig. 3). In Subarea 4 the fishery was quite stable up to 1964; landings increased substantially in 1965 and 1966 followed by a rapid decline in 1970 and 1971 to a catch level only about one-half of that which existed up to 1965. Landings were also quite stable in Subarea 5 up to 1964, followed immediately by more than a doubling of the catch in 1965 and 1966. This was followed by a very rapid 10-fold decline in catch up to 1970 and 1971.

Up to 1965 the haddock fishery was conducted mostly by Canada, USA and Spain. The peak landings in 1960-61 and 1965-66 correspond to periods when the USSR took substantial quantities, first in Subarea 3 and later in Subareas 4 and 5. While Canadian landings had declined in 1970 and 1971 to less than half the average level of the 1950's and 1960's, the USA landings in the last two years were less than one-fifth of the 1952-65 catch level.

Redfish

Annual landings more than tripled between 1952-56 and 1959, when nearly 400,000 tons were taken, and declined just as rapidly to less than 200,000 tons by 1962 (Fig. 4). During 1965-70 (except for a decrease in 1968) the annual yield was about 225,000 tons. In 1971 there was a substantial increase to 270,000 tons. The most significant changes occurred in Subareas 2 and 3 in the late 1950's when the redfish stocks were being extensively exploited. While the Subarea 5 catch has remained relatively stable over the entire period, the landings in Subarea 4 more than doubled between 1965 and 1971.

The rapid upsurge in redfish landings in the late 1950's was due mainly to greatly increased catches by Federal Republic of Germany, Iceland and USSR, but the catches by these countries subsequently declined to much lower levels. The USA fishery, which took a major part of the total redfish yield in the early 1950's, declined gradually after 1960 to a level where catches in recent years were somewhat less than one-half the pre-1960 level. The Canadian redfish fishery gradually increased after 1960 to about 4 times the pre-1960 level, USSR catches have increased since 1968 and significant quantities have been taken by Non-members (mainly GDR) after 1962.

Silver hake

The silver hake fishery, carried on solely by USA in Subarea 5 prior to 1962, underwent significant development during 1962-65 by USSR in both Subareas 4 and 5 (Fig. 5). Total annual catches increased from less than 50,000 tons during 1954-61 to nearly 400,000 tons in 1965. There was a rapid decline to about 100,000 tons in 1965 and a subsequent increase to about 225,000 tons in 1970 and 1971. After 1962 the bulk of the yield has been taken by USSR.

Flounders

The flounder fisheries (mostly American plaice, yellowtail, witch and Greenland halibut) have undergone phenomenal development after 1962 with the major increase in Subarea 3 and rather smaller increases in Subareas 2, 4 and 5 (Fig. 6). Between the 1952-55 period and 1968-69 flounder landings increased from about 50,000 tons to 600,000 tons and have remained fairly steady at the latter level during 1968-71.

The fishery was carried on almost entirely by Canada and USA in the 1950's and early 1960's. After 1964 USSR developed a substantial flounder fishery which in recent years took on the average more than one-quarter of the annual yields. The USA fishery expanded after 1963 to about twice the pre-1963 level, and Canadian landings after 1965 were more than 4 times the level of the 1950's.

Herring

Although there was a substantial increase in total herring landings in 1962, the greatest development occurred after 1965 in Subareas 3, 4 and 5 (Fig. 7). Landings increased from less than 200,000 tons in the 1950's to nearly 1,000,000 tons in 1968 and 1969. By 1971 the total catch had declined to about 750,000 tons.

During 1954-60 all of the herring were taken by Canada and USA. USSR entered the fishery in 1961, followed by Poland in 1966 and Federal Republic of Germany in 1967. The catches of "Others" (mainly GDR) also increased after 1966. While the Canadian fishery increased from an annual average of about 100,000 tons during the 1952-64 period to more than 500,000 tons in 1968, USA landings have declined since 1963. Except for Poland, the catches of most of the countries names in Fig. 7 have declined since 1969.

Mackerel

Up to 1965 the annual mackerel catch was generally less than 15,000 tons, but the very rapid development of the fishery in Subarea 5 and Statistical Area 6 resulted in a 1971 catch exceeding 350,000 tons. Most of the mackerel catches were taken by Poland, USSR and Non-members (mainly GDR).

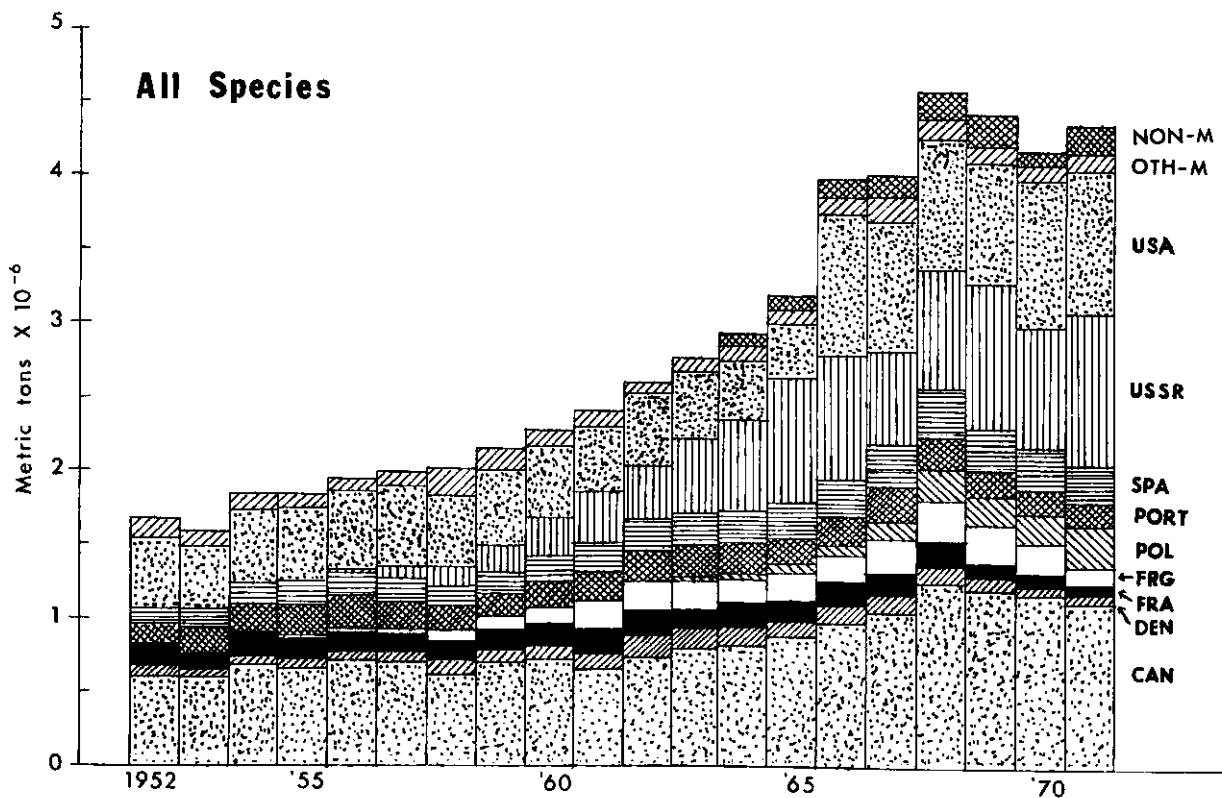
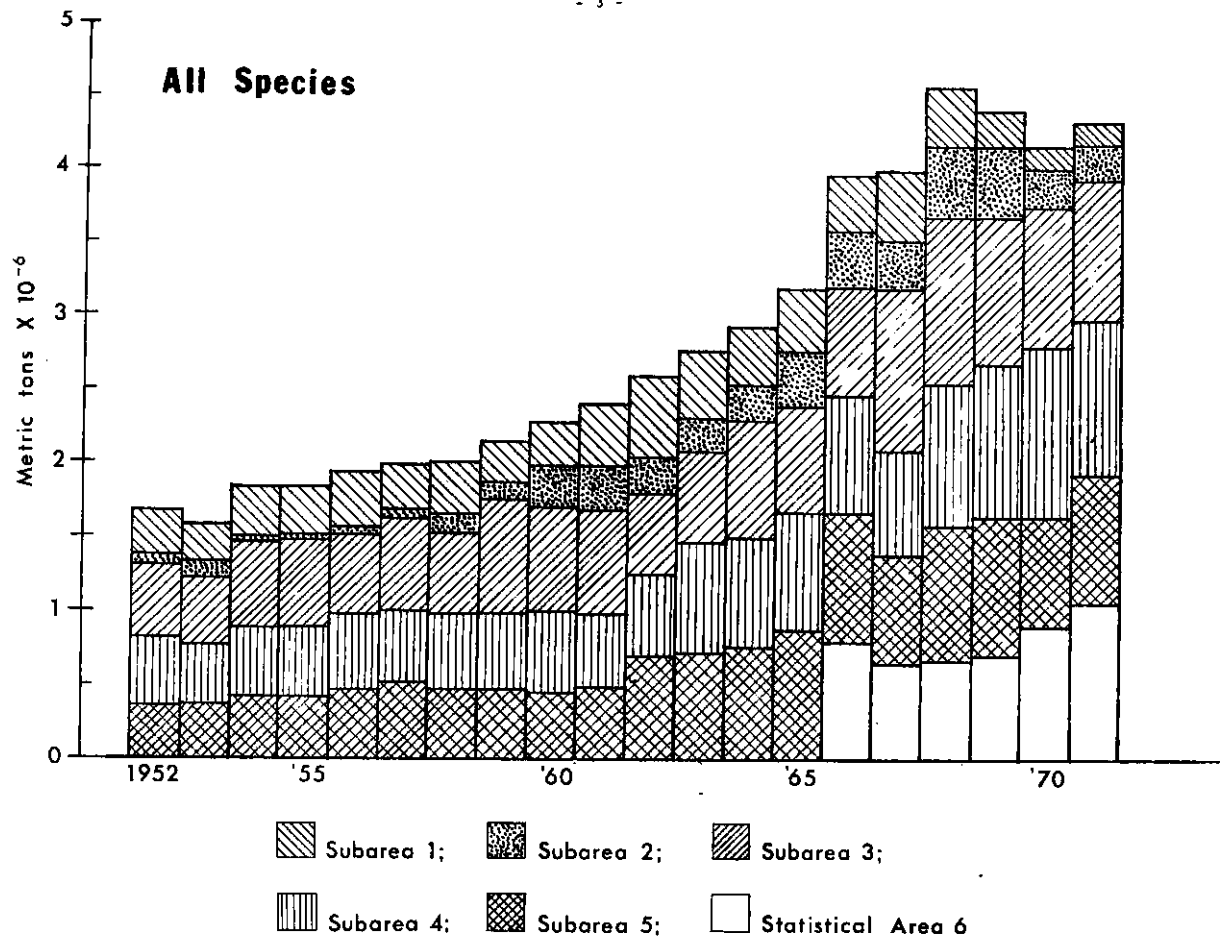


Fig. 1. Landings of all species by subarea and country, 1952-71.

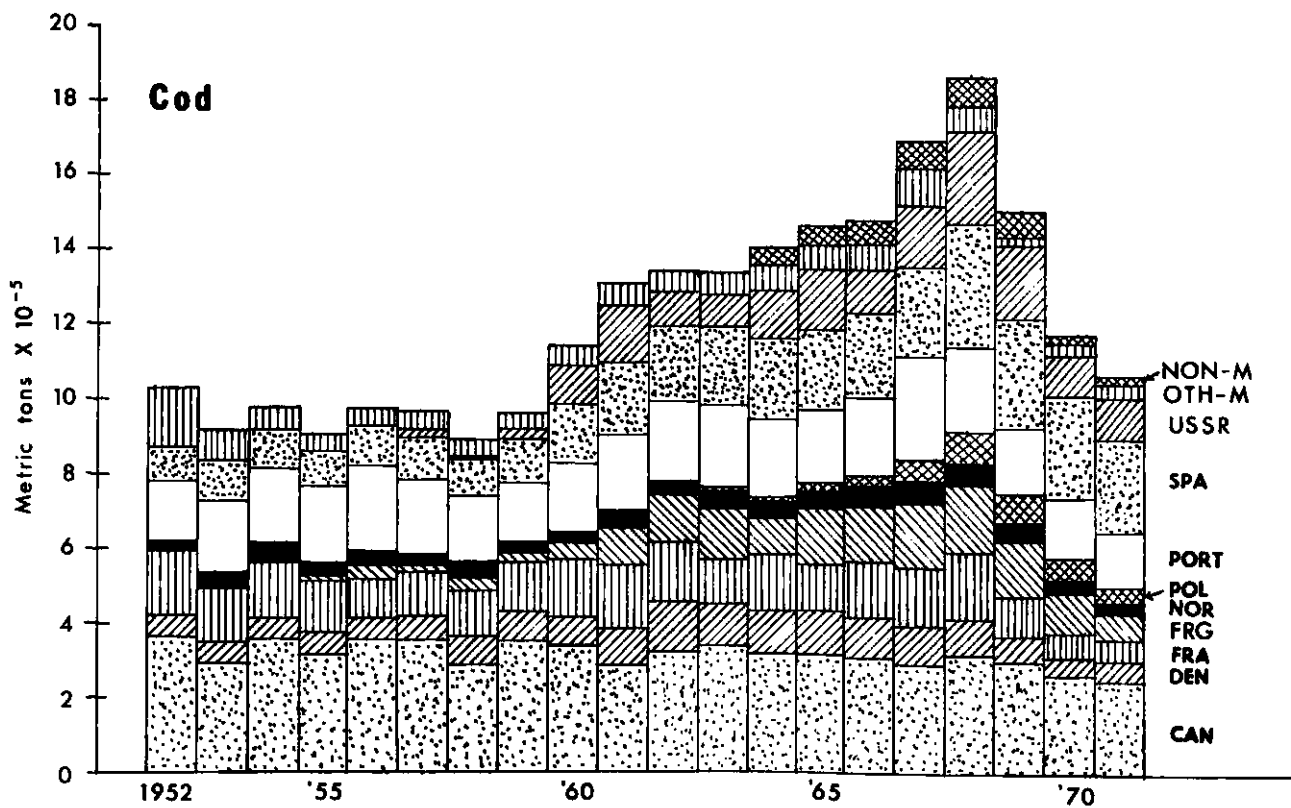
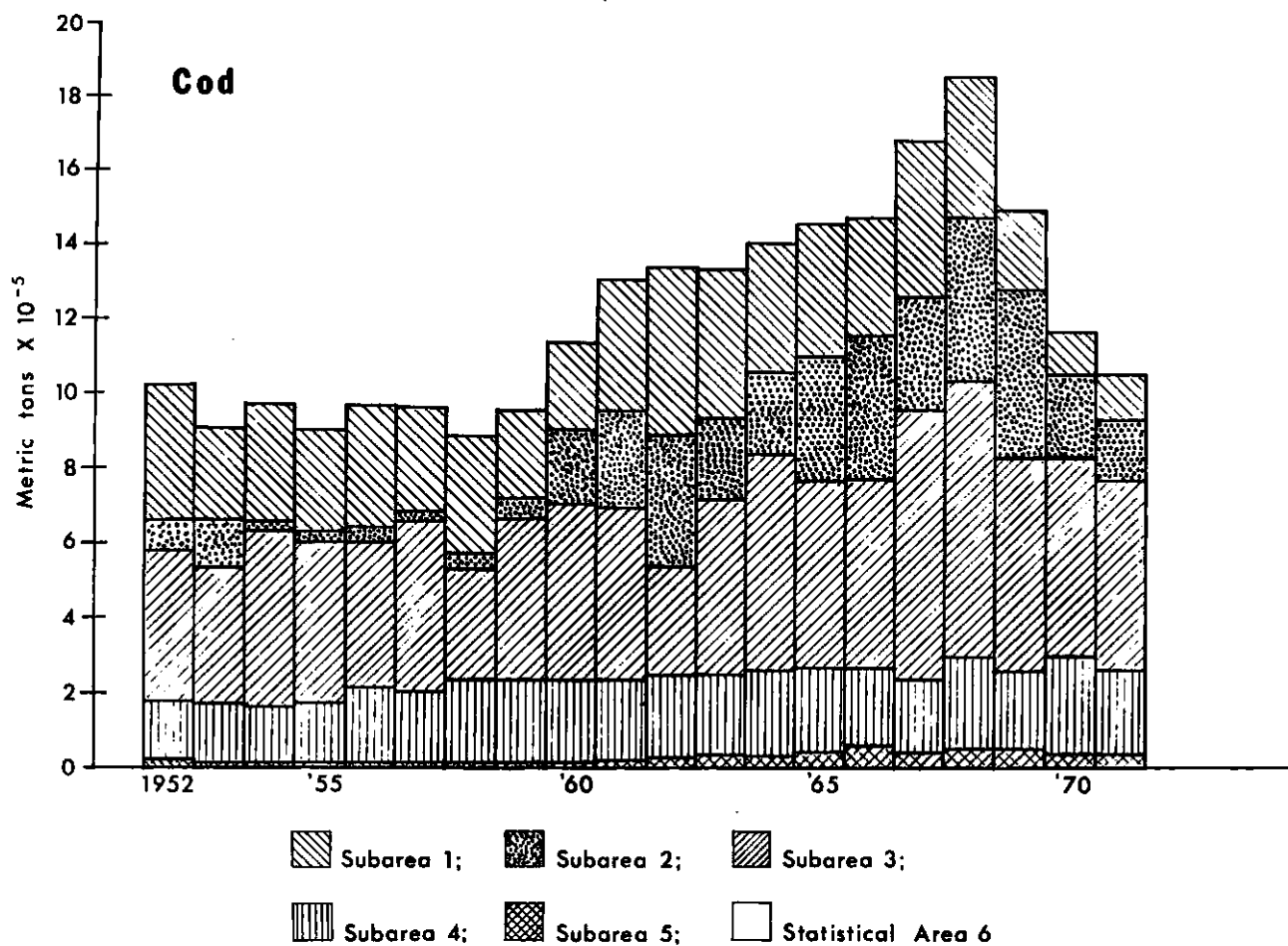


Fig. 2. Landings of cod by subarea and country, 1952-71.

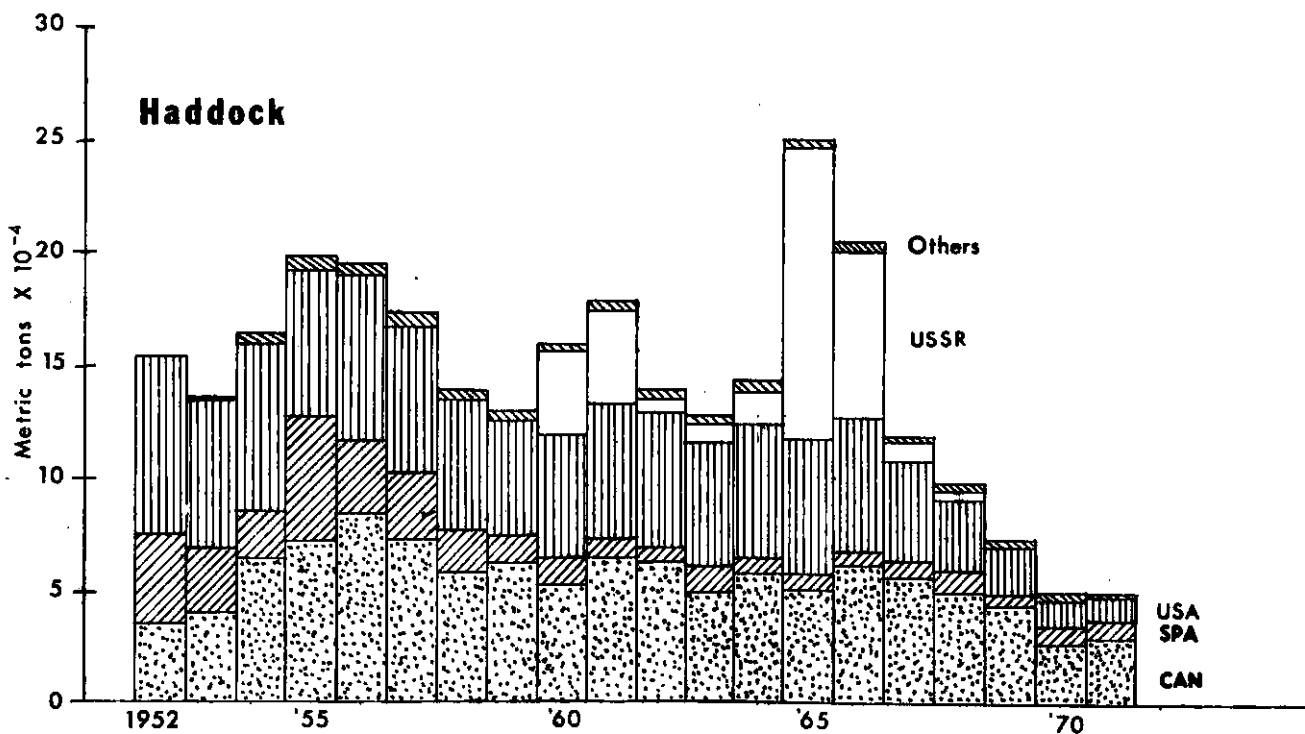
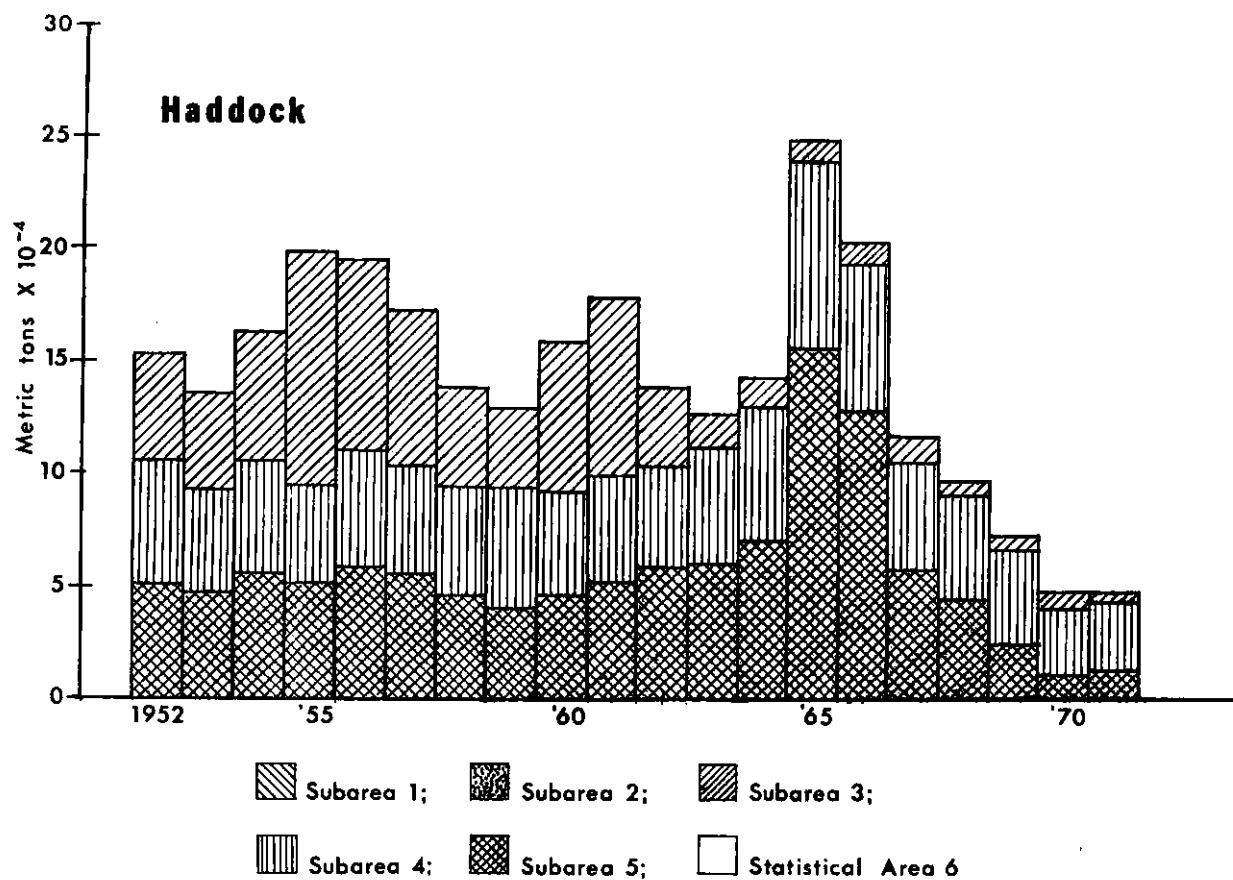


Fig. 3. Landings of haddock by subarea and country, 1952-71.

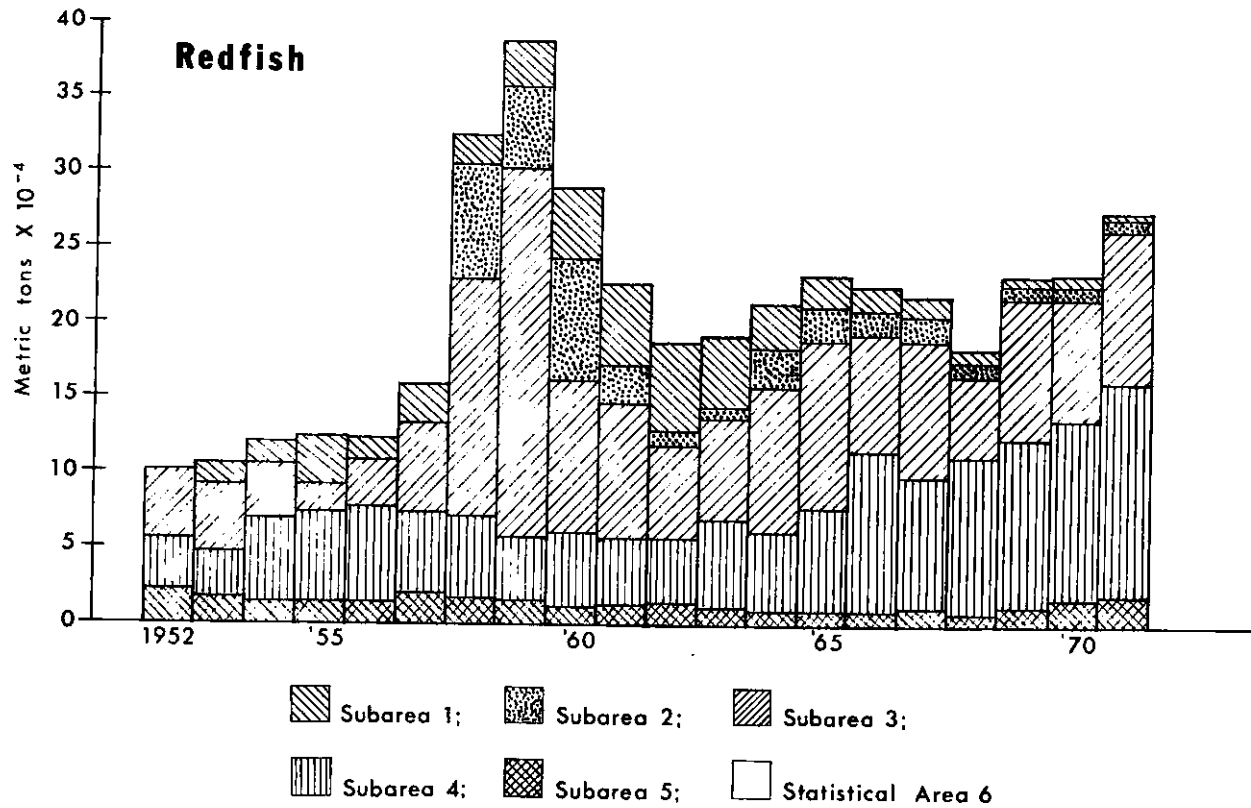


Fig. 4. Landings of redfish by subarea and country, 1952-71.

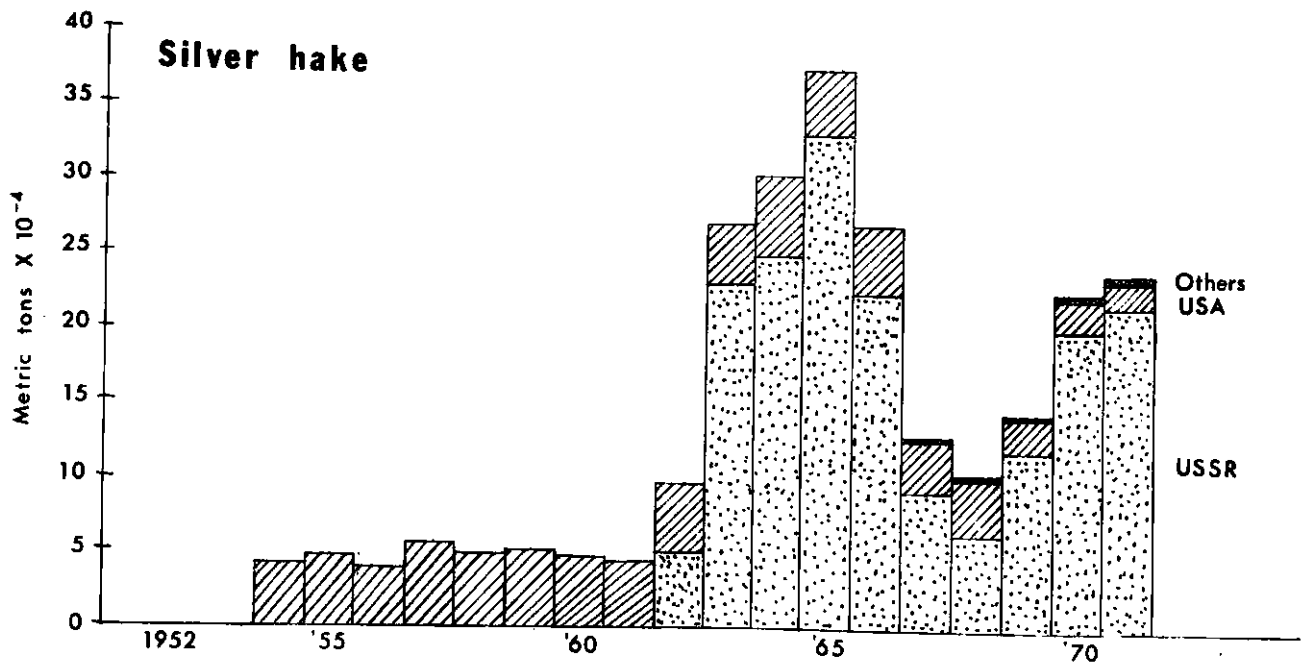
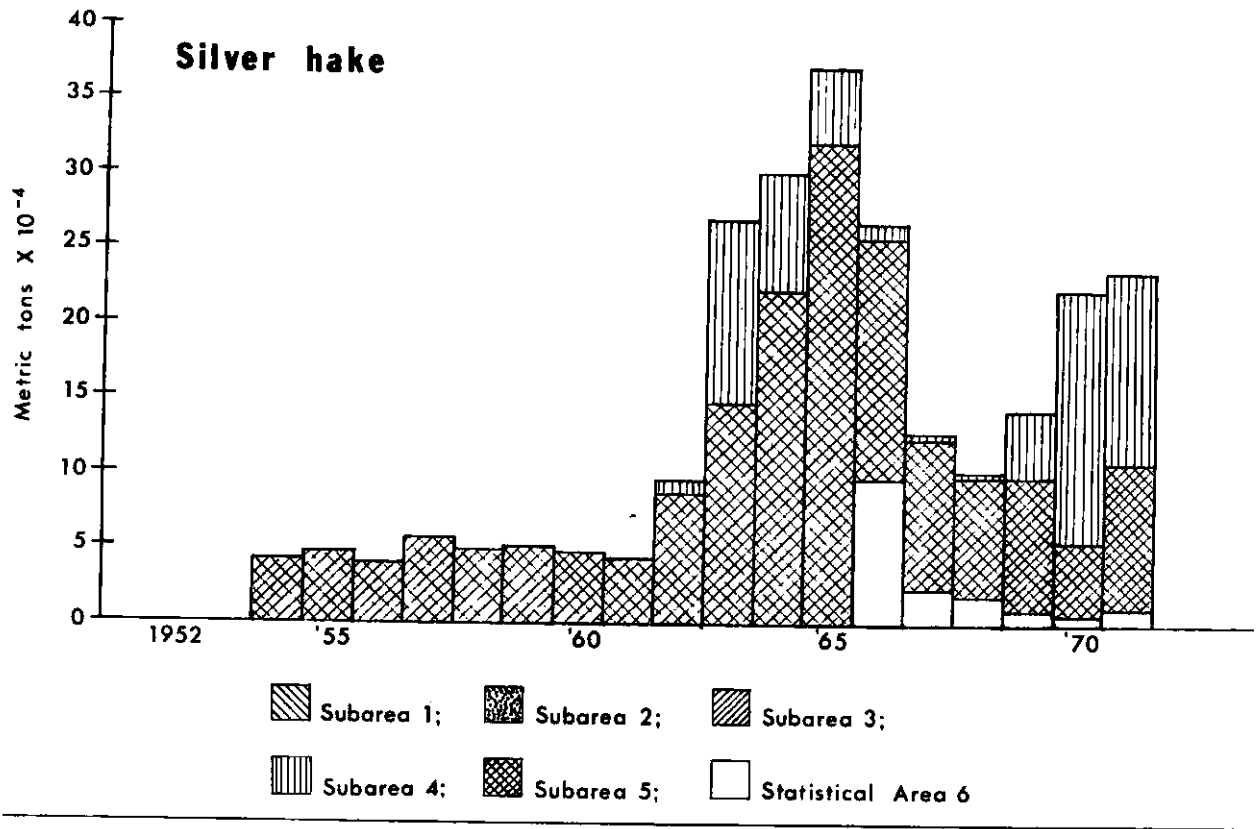


Fig. 5. Landings of silver hake by subarea and country, 1954-71.

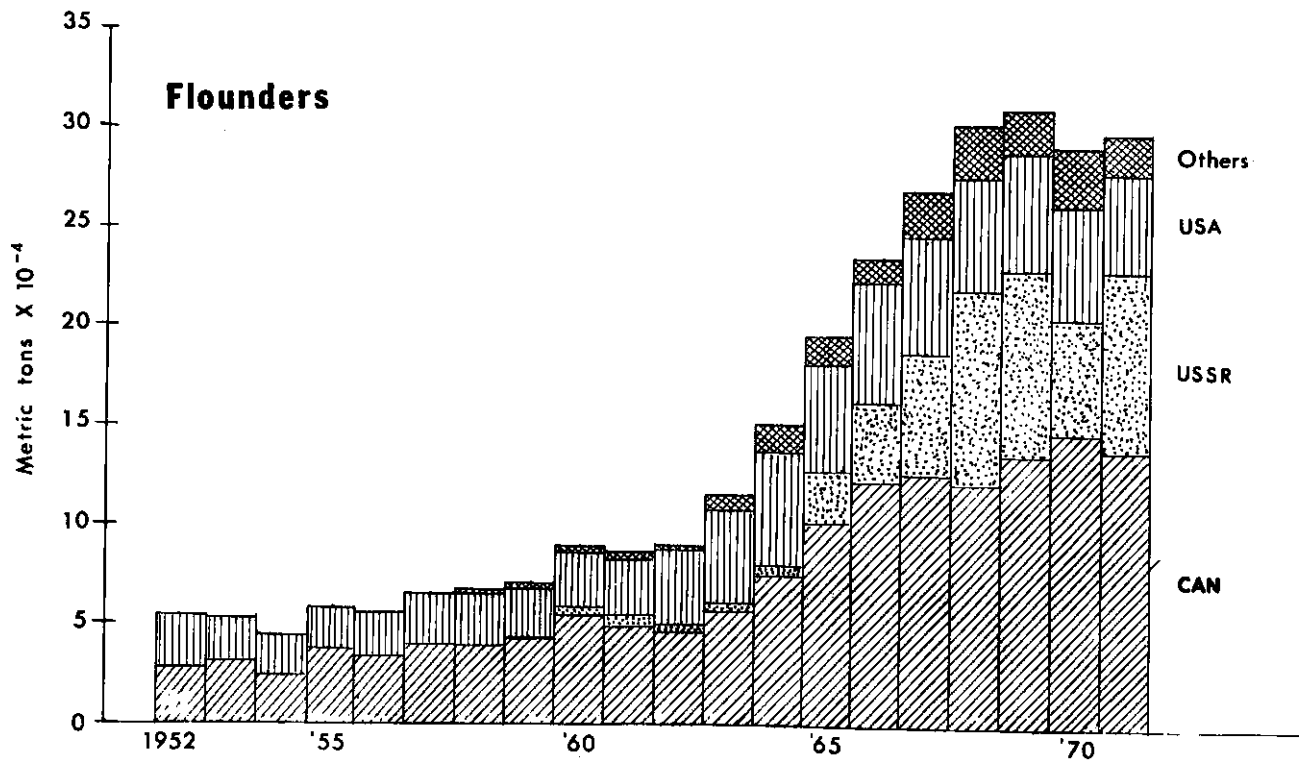
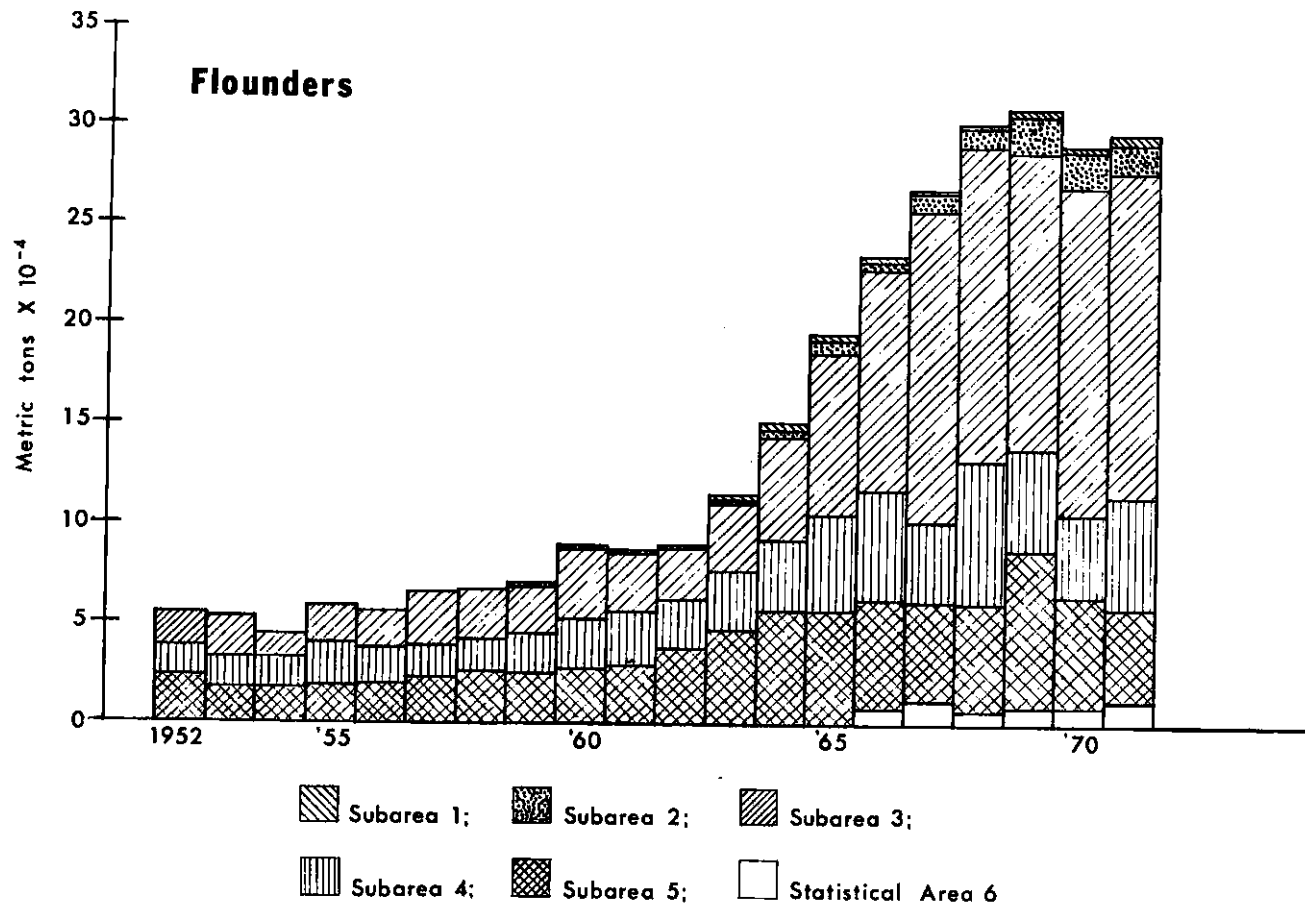


Fig. 6. Landings of flounders by subarea and country, 1952-71.

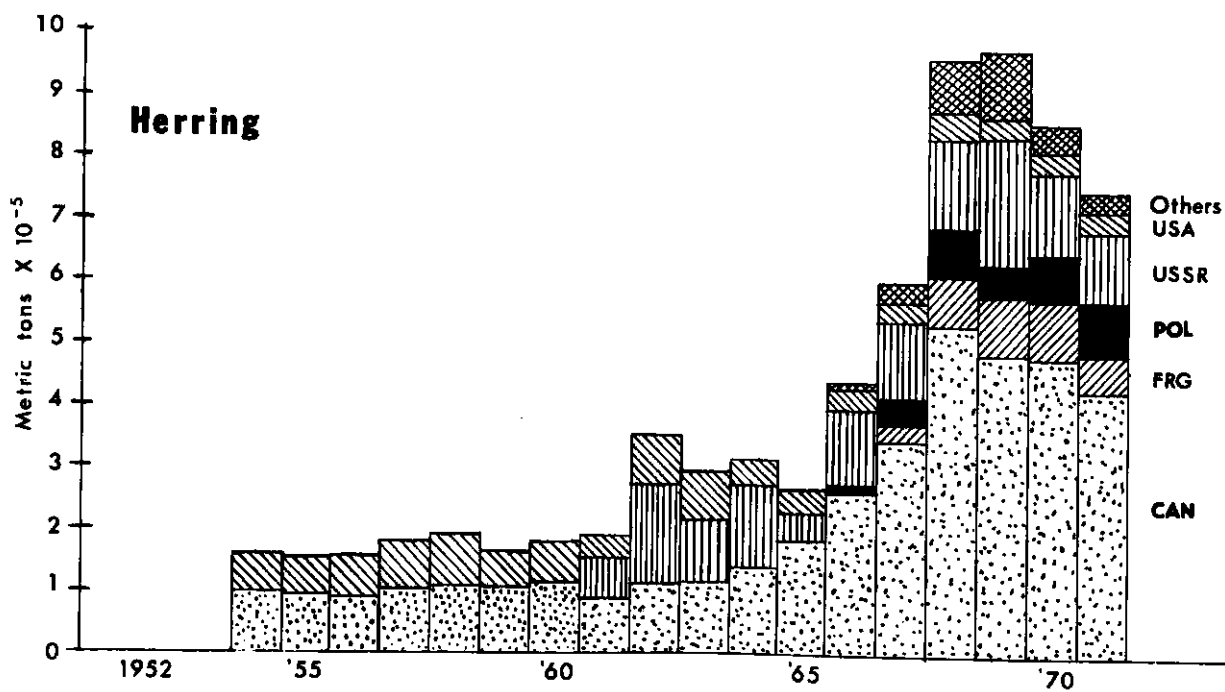
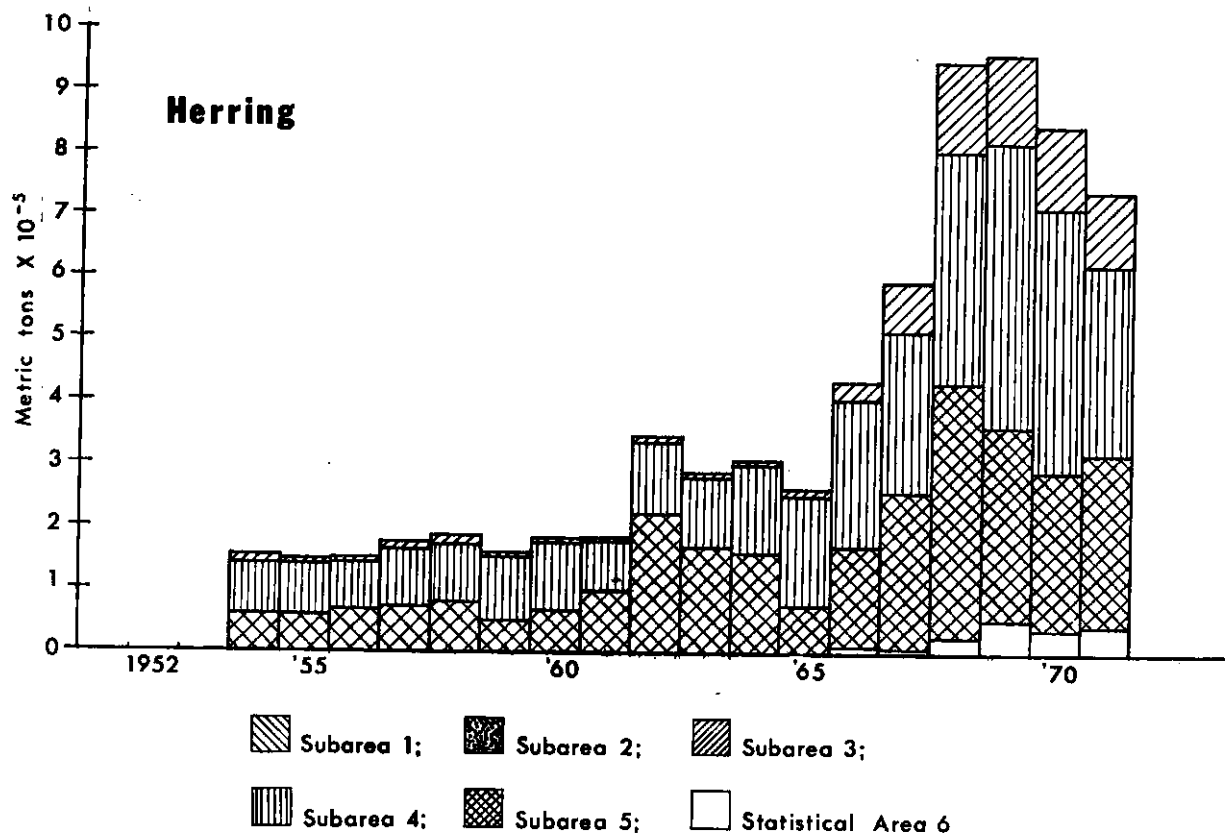


Fig. 7. Landings of herring by subarea and country, 1954-71.

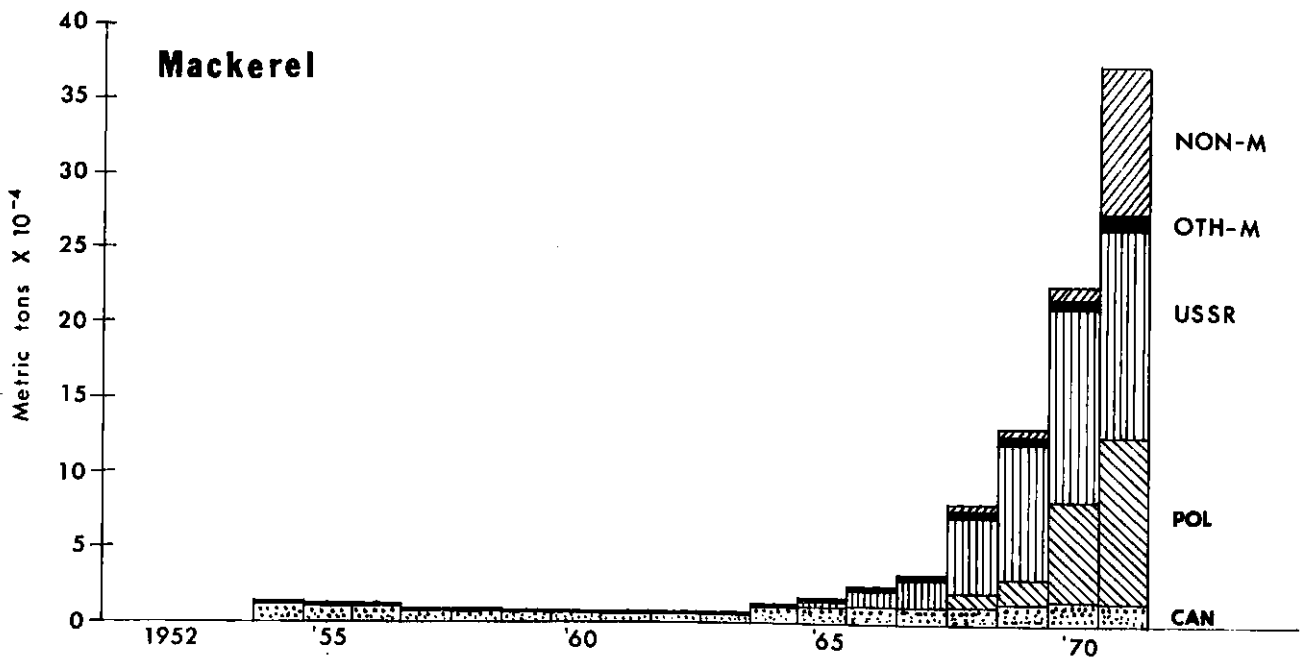
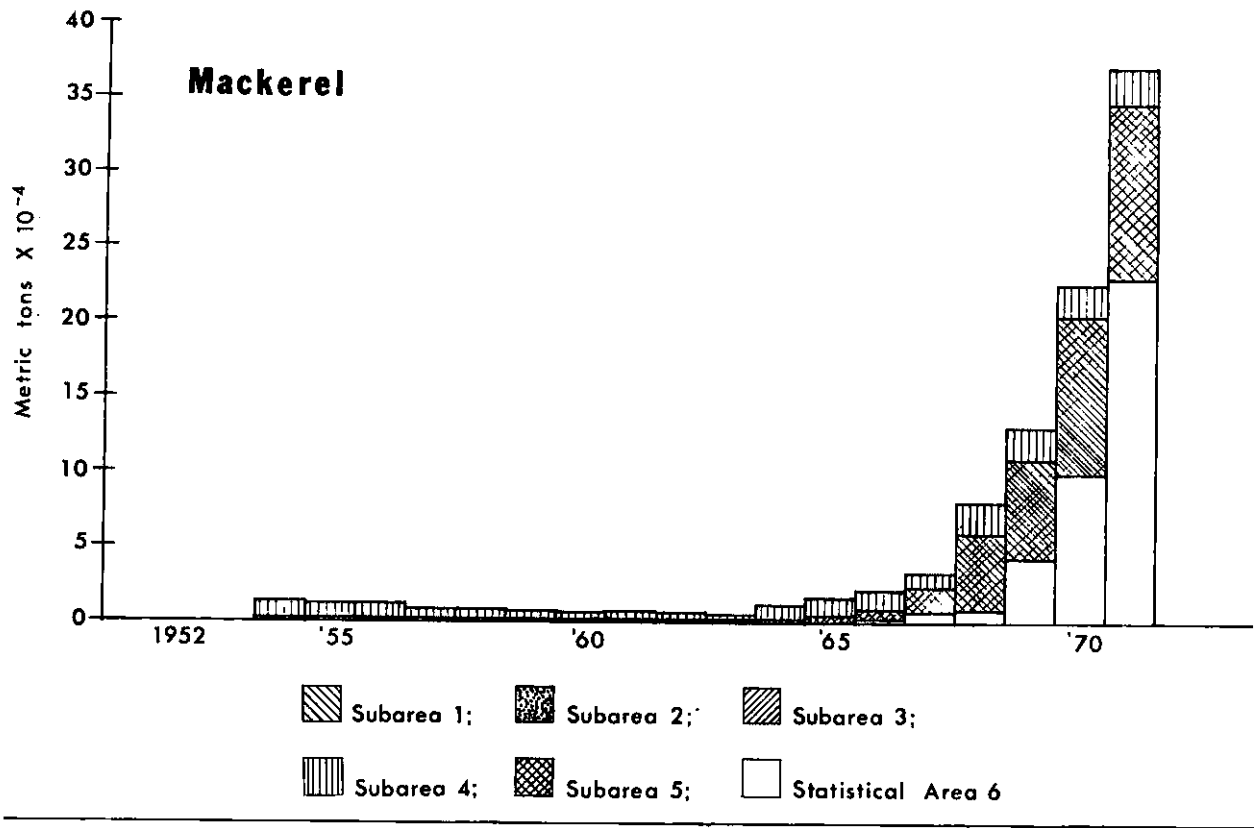


Fig. 8. Landings of mackerel by subarea and country, 1954-71.