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(Revised)ANNUAL MEETING - JUNE 1968Status of Fisheries and Research carried out in Subarea 5 in 1967by
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Reports on research were submitted by Canada, Fed.Rep. of Germany, Poland, Romania, USSR, USA.

1. Status of the Fisheries

The total nominal catch continued to fall from a high in 1965 of 890,000 tons to 867,000 tons in 1966 and 708,000 tons in 1967. The countries reporting fishing in the Subarea were Canada, Fed.Rep. of Germany, Poland, Romania, Spain, USSR and USA and some non-member countries for the first time.

Cod catches fell from 57,000 tons in 1966 to 42,000 tons in 1967. This accompanied the much larger decrease in haddock from 127,000 tons (1966) to 57,000 tons (1967). The decrease was largely due to the much smaller USSR groundfish effort but also to a reduced abundance of haddock.

Silver hake catches fell from 162,000 tons (1966) to 101,000 tons (1967). This decrease was also largely due to the much smaller USSR effort as well as decreased abundance.

Red hake catches decreased from 89,000 tons (1966) to 44,000 tons (1967).

Yellowtail decreased slightly from 31,000 tons (1966) to 26,000 tons (1967) and redfish increased minimumly from 10,000 tons (1966) to 11,000 tons (1967).

Herring landings were up greatly from 166,000 tons (1966) to 244,000 (1967). All countries fishing in the Subarea shared in the increase which was due to greater effort but the Federal Republic of Germany with 26,000 tons and non-member countries with 15,000 tons were new to this Subarea fishery.

Sea scallop landing increased slightly from 49,000 tons (1966) to 53,000 tons (1967).

2. Work Carried OutCanada:

Collaborative catch statistics collection on Georges Bank scallops was carried out with USA. Swordfish research showed an expansion of the fishery offshore within the Gulf Stream boundaries. Two samples of herring from northern Georges Bank were examined.

Federal Republic of Germany

Four samples of herring from different localities and months were examined. The predominant year class was 1960. Meristic characters showed all samples probably belonged to the same stock.

Poland

Nine hydrographic sections were made on Georges Bank and plankton samples taken on 49 stations. Herring otolith samples showed the 1960 year class to be predominant. The most abundant year class in the haddock samples was 1962.

Romania

Samples of herring (dominant year class 1960) and blueback herring (dominant year class 1963) were examined for age. Hydrographic and meteorological observations were made.

USSR

Four seasonal oceanographic surveys were carried out and plankton research continued at standard stations on Georges Bank. Collaborative plankton sampling studies with USA were begun.

Studies on silver hake showed 4 year olds to be dominant. Biochemical blood studies indicate different stocks of silver hake on Georges Bank and areas further south.

The greatest part of the reduced haddock catches was made up of the formerly abundant 1962 and 1963 year classes and no strong year class has appeared since.

The most abundant year classes of herring were 1960 and 1961 with no indication of a strong year class since that time.

UK

Continuous plankton recorder studies extended into Subarea 5.

USA

Extensive hydrographic studies were carried out in the Subarea. Plankton productivity investigations indicate that the phytoplankton could only be maintained by a rapid recycling of nutrient materials. Studies of coastal zooplankton were continued. Collaborative plankton sampling work with the USSR was begun. Quantitative study of macrobenthos was continued.

Studies of the population structure of haddock have advanced. The total mortality rate increased greatly from 1964 to 1965 and the fishing rate appears to be above that for maximum sustained yield.

The effects of fishing on silver hake continue to be studied and were part of a joint US-USSR groundfish survey.

Growth and meristic studies indicate that Georges Bank herring are a separate stock from those in Nova Scotia and Maine.

Tuna tagging was continued.

Atlantic salmon smolt tagging was continued.

3. Haddock

The decrease in haddock landings from 149,000 tons in 1965 to 57,000 tons in 1967 is mostly the result of less fishing which in turn was caused by decreased abundance. The formerly abundant year classes of 1962 and 1963 have been greatly reduced by heavy fishing and no strong year classes have appeared since. It appears unlikely that good new recruitment to the fishery will take place before 1971 at the earliest. This case is being considered by the Assessment Subcommittee.

4. Silver Hake

The decrease in silver hake landings is from decreased fishing pressure and reduced stocks. It is expected that the stocks will increase if the fishing pressure remains at a moderate level.

5. Herring

The high 1967 catch of 244,000 tons is entirely the result of increased fishing pressure. There appear to be two stocks of herring in the Subarea, one on Georges Bank and south of Georges Bank and one in the Gulf of Maine. The dominant year classes are 1960 and 1961. If new strong year classes are not recruited soon the high level of catches will not be maintained.

6. Yellowtail

The yellowtail fishery has not fluctuated very widely and it is believed that catches of the present order of magnitude can be continued if unfavourable environmental conditions do not interfere. The 1967 catch was 26,000 tons.

7. Scallops

The scallop landing in 1967 of 53,000 tons was largely Canadian (42,000 tons) and concentrated on the north-eastern edge of Georges Bank.

8. USA-USSR Joint Survey

The USA and USSR made comparative and simultaneous joint surveys in Subarea 5 for both plankton and groundfish comparing vessels and gear. The USA vessel was Albatross IV of 1,000 gross tons and the USSR vessel the Albatros of 500 gross tons. The data from the statistically designed experiments has been only partly analysed but has already shown the value of such collaborative and joint field experiments. This exercise has been regarded by both parties as highly informative, useful and successful.

9. Research Documents Pertaining to Subarea 5

68/5, 8, 11, 13, 15, 16, 17, 18 and supplement, 20, 21, 22, 34, 35, 39, 50, 54, 59, 60, 69, 75, 76, 85, 86, 87, 88, 89, 90, 91, 92, 97, 98.