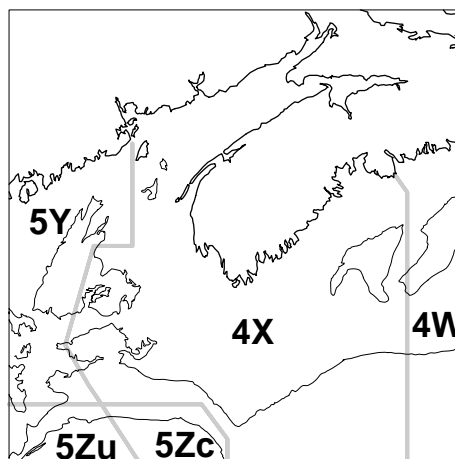


**GERMAN BANK
SCALLOP**



Background

The Sea Scallop, *Placopecten magellanicus*, is found in the Northwest Atlantic, from Cape Hatteras to Labrador. Scallops are aggregated in patches and harvestable concentrations are called beds. Major areas of offshore fishing activity are Georges Bank, the Scotian Shelf (Middle Grounds, Sable Island Bank, Western Bank, Browns Bank, and German Bank) and St Pierre Bank. Scallops prefer a sandy, gravel bottom and occur in depths of 35 to 120 m.

Scallops have separate sexes. They mature at age 2. The female gonad is red in colour and the male gonad colour is creamy white. The major spawning period is August to October. The fertilized eggs develop through several stages until settlement on the bottom within 30 to 60 days.

Growth is estimated from the position of annual rings on the shell. The growth rate varies from one area to another and is influenced by season, depth, and temperature. German Bank is an area of low productivity with the slowest growth-rate of all the offshore scallop areas.

Offshore scallop vessels range from 27 to 46 m length overall. The offshore fleet uses a New Bedford offshore scallop rake or drag, 4 to 4.9 m in width. Two drags are fished simultaneously, one on each side of the vessel.

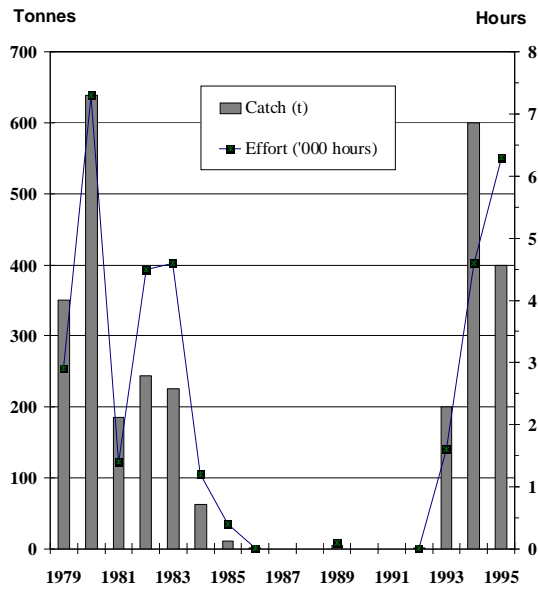
The Fishery

Landings (hundreds of tonnes)

Year	70-79 Avg.	80-89 Avg.	1991	1992	1993	1994	1995
TAC	-	-	-	-	2.0	6.0	4.0
Catch	0.6	1.7	0.0	0.0	2.0	6.0	4.0

German Bank has been exploited off and on since the mid 1960s by the Bay of Fundy and the offshore scallop fleets under common access but different regulations. While the offshore scallop fleet fished under a meat count regulation, the Bay of Fundy fleet did not have a count restriction. The Inshore/Offshore Agreement of 1986 established a separation of the fleets at latitude 43°40' North. The offshore fleet exploits scallop beds south of this line.

Available from: Maritimes Regional Advisory Process, Department of Fisheries and Oceans, P.O. Box 1006, Stn. B105, Dartmouth, N.S. Canada, B2Y 4A2 Telephone: 902-426-8487. E-mail: d_geddes@bionet.bio.dfo.ca.



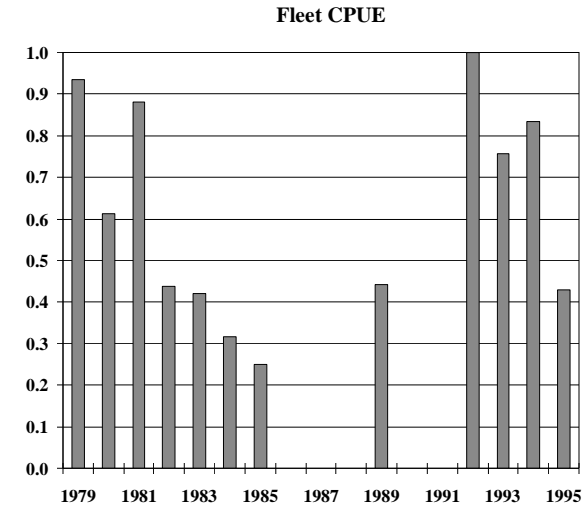
During the early 1980's, **catches** on German Bank south of 43°40' were important but steadily declined until 1985. The fishery resumed in 1993 after a seven-year interruption. It is a seasonal fishery to avoid gear conflicts with the lobster fishery. In 1993, a 200 t TAC was harvested over seven weeks. The meat count was lowered to 40 meats per 500 g for 1994. In 1994, the 'roll-over' TAC agreed upon by industry and fishery managers resulted in three quota increments of 200 t for each six-week period (total 600 t) as catch-rates did not decrease significantly and meat count was met. In 1995, 400 t were fished. The fishery closed once the second increment was caught as performance declined rapidly during that second increment. **Effort** has been steadily rising since 1993. It increased 30% from 1994 to 1995 while the areas fished expanded by 33%.

Resource Status

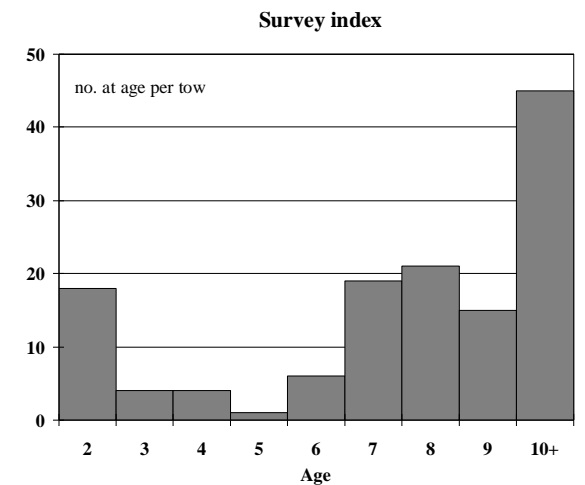
Commercial **catch-rates** were high in the early 1980s but had decreased markedly by 1985. Since the fishery resumed, catch-rates had been

in the high range. However, there was a 50% decrease in the commercial catch-rates from

1994 to 1995. The **research survey abundance** for ages 7+ on the expanded grounds was no better than that on the grounds fished in 1993-94. The average count in the catch remained 30 meats per 500 g.



The 1995 research survey results indicated good densities of ages 7+ scallops, particularly ages 10+. Although the survey gear is unlined, there is good evidence of **recruitment** (age 2) over some beds.



Outlook

There is limited recent information available for the German Bank scallop aggregation given that the fishery resumed in 1993 after a seven year interruption.. The 1995 survey, which

indicated good densities of large scallops, took place before the fishery started. Fishing activities may have considerably reduced these densities. Catch-rates declined early in the 1995 fishing season and remained at a lower level until the fishery closed. The meat count increased 30% during the 4 months fishery. The fishery performance at the end of the season would indicate that directing for aggregations of the large scallops was becoming difficult. Although the presence of pre-recruits is promising, there was a decline in survey abundance for ages 5 and 6.

Catch levels of 200 - 300 t have not been sustainable in the early 1980's. The rapid decline in the 1995 fishery performance would suggest that recent catch levels are not sustainable and that a TAC of 100 t would be more appropriate. Catch-rates and meat counts should be monitored to provide more information to move toward a sustainable fishery.

For More Information

Contact:

Ginette Robert
Invertebrate Fisheries Division
1707 Lower Water Street
P.O. Box 550, Halifax
Nova Scotia, B3J 2S7

TEL: (902) 426-2616
FAX: (902) 426-1862
e-mail: G_Robert@bionet.bio.dfo.ca