

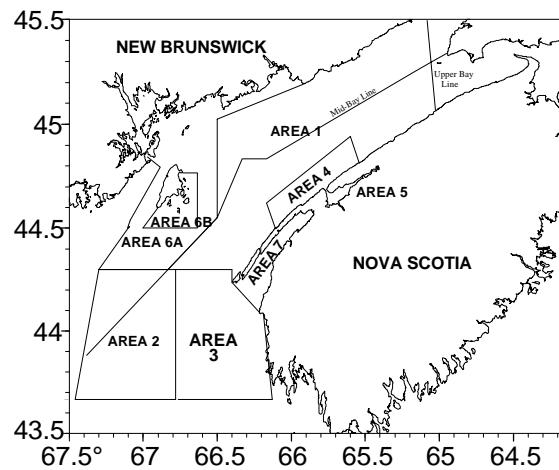
Area 6 Southwest New Brunswick Scallop

Background

The sea scallop *Placopecten magellanicus* occurs only in the northwest Atlantic Ocean from Virginia north to Labrador. Within this area, scallops are concentrated in persistent, geographically discrete aggregates or "beds", many of which support valuable commercial fisheries. The larger beds are found offshore and in the Bay of Fundy along the Nova Scotian coast. Scallops in different beds, and in different areas of large beds, show different growth rates and meat yields.

Unlike many commercial scallop species, the sea scallop has separate sexes. Male scallops develop a white gonad in the summer months, while female gonads are bright red. Eggs and sperm are released into the water and fertilization takes place in the sea. Spawning begins in late August to early September, and the larvae drift in the water for almost a month before settling to the bottom in October.

Area 6 is fished by two fleets with limited entry. Harvest restrictions include: gear size, seasonal closures, minimum shell height, and minimum allowable meat count with total allowable catch quota for the Full Bay fleet.



The Fishery

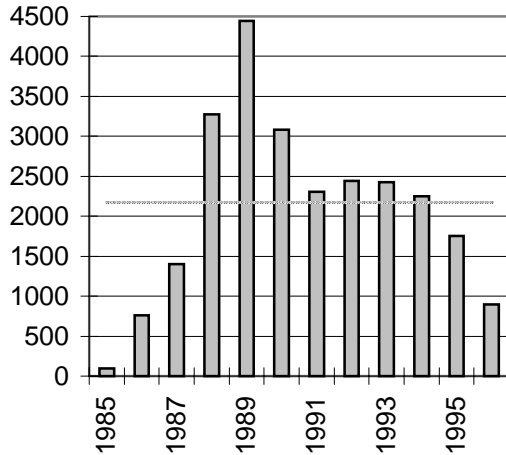
Landings in the whole of the Bay of Fundy by all fleet sectors have declined by 49% in 1996 over 1995, including catches of 76.7 mt from SFA29 outside of the regulation fishing area. The landed value of the catch was approximately \$13.9 million.

Landings (mt)

Ave	1991	1992	1993	1994	1995	1996*
85-90	2319	2304	2443	2429	2254	1754
	900					

*preliminary

Bay of Fundy Scallop Landings (mt) (dash line: average over time series)



Landings in Area 6 are difficult to calculate, with the two fleets fishing together having different reporting systems. In 1996, 154 mt of scallop meat were landed in statistical districts 50-53 (this approximates the newly defined Area 6). These are the lowest landings since the early 1980s. It is important to note that, for this area, the port where the scallops are landed do not necessarily reflect where catch was taken.

Summary of scallop landings (mt of meat) for southwestern New Brunswick (statistical districts 50 to 53)

Year	80-93 Avg.	1994	1995	1996*
Landings	336	250	229.5	154.1

*preliminary data

Area 6 encompasses the Grand Manan fishing area (6B), which is comparatively well studied. This area was separated from the rest of Area 6 (6A) until scientific advice could be gathered from the 6A portion of the area. In 1997, both subareas were fished under the same Interim Management Plan by the Full Bay fleet. The Mid Bay fleet followed the same meat count and size restrictions but was not under a TAC restriction.

1997 Interim Management Plan

TAC: 50 mt

Meat Count: 45/500 (modified from 30/500g)

Minimum Meat Weight: 10 g (voluntary)

Shell Height Minimum: 104 mm

Season: Open January 14, 1997 to May 31, 1997. Some restrictions may apply pending industry agreements on fishing plans for overlap areas or other regulated closed areas or portions of areas.

Resource Status

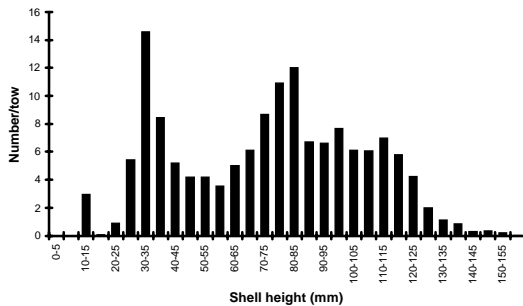
We have no information for Area 6 as a whole but there is **survey** information for Area 6B. Research surveys were conducted between 1986 and 1991 but discontinued thereafter. The first research survey since 1991 was conducted in September 1996. Abundance estimates from this survey were compared to those obtained from the "Inside" zone from 1986 to 1991. The average number per standard tow (age-1 and older; number per seven-gang drag or 4265 m²) was higher than those observed in 1989 to 1991 but substantially lower than values seen 1986 to 1988. The numbers per tow of older scallops (ages 8 and older) have remained remarkably stable in all years surveyed. The numbers of prerecruits (ages 1-3) were moderate compared to those observed in earlier years but the numbers of 4 to 7 year-olds were relatively low.

Research survey indices for area 6B as number per standard tow.

Ages	1986	1987	1988	1989	1990	1991	1996
1-3 yr	138	95	84	21	12	28	56
4-7 yr	40	135	126	81	53	67	65
8+ yr	28	30	21	24	30	30	24
Total	206	260	231	126	95	125	145

An examination of the standardized shell-height distribution for the survey indicates large numbers of pre-recruits were present.

Shell-height distribution of sea scallops captured in area 6B, September 1996.



Outlook

Low exploitation of the incoming year-classes would allow them to reach full growth potential. To avoid blending of small scallops and loss of yield of pre-recruits, a meat count of 30/500 g is recommended.

Management Considerations

Many lobster fishermen are concerned by the damage that scallop gear may have on lobster habitat and the possible effects that the green sea urchin fishery may have on scallop habitat.

For more Information

Contact: Division Manager
 Invertebrate Fisheries Division
 Science Branch
 Gulf Fisheries Centre
 P.O. Box 5030
 Moncton, NB E1C 9B6
 Tel: (506) 851-6204
 Fax: (506) 851-2387
 E-Mail: ChadwickM@gfc.dfo.ca

This report is available from the:

Maritimes Regional Advisory Process
 Department of Fisheries and Oceans
 P.O. Box 1006, Stn. B105
 Dartmouth, Nova Scotia
 Canada B2Y 4A2
 Phone number: 902-426-7070
 e-mail address: v_myra@bionet.bio.dfo.ca

Internet address: <http://csas.meds.dfo.ca>

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