

BLACKBACK (WINTER) FLOUNDER IN DIVISIONS 3K, 3L AND 3Ps

Background

In the western north Atlantic, winter flounder (*Pleuronectes americanus*), commonly referred to as blackback, is locally abundant from southern Labrador to Georgia, inhabiting muddy to moderately hard bottoms. Throughout its range, it is known to migrate seasonally, moving away from the coast in the winter. At any time of year, around the coast of Newfoundland, it is generally not found in depths exceeding 40 m. In this shallow habitat, it is subject to a wide range of water temperatures and is capable of surviving sub-zero conditions.

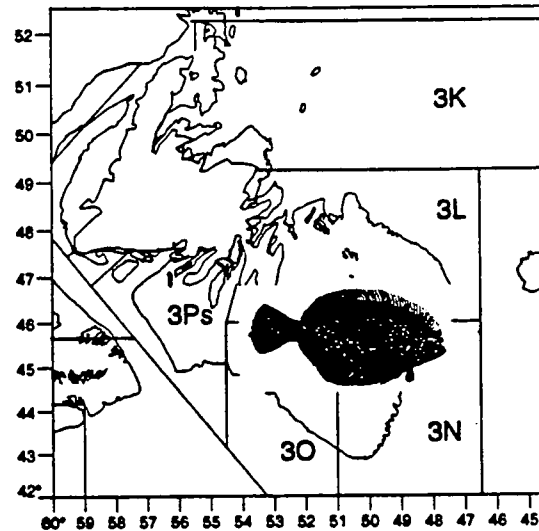
Spawning occurs in late winter or early spring. The females release several hundreds of thousands of eggs that settle to the bottom, adhering to rocks and vegetation. After hatching, the larvae drift in surface waters for several months before metamorphosing and settling to the bottom.

Growth rates vary among areas but little is known about the growth rates of winter flounder in Newfoundland waters.

It is an opportunistic feeder, taking a variety of benthic organisms, mainly mollusks and small crustaceans and also feeding on the eggs of other spawning fish.

Winter flounder has been taken locally around the coast of Newfoundland in NAFO divisions 3K, 3L, 3P and 4R with gillnets as lobster bait for years. The gillnet fishery has also supported limited food markets since the early 1970's, the product commonly referred to as lemon sole. On occasion in the past, experimental shallow water trawl fisheries have yielded reasonable catches. The flesh of winter flounder is of good quality and in northeastern U.S., it is valued as both a commercial and sport fish. With the closure of the cod fisheries in 1992 and 1993, attention has focused on this and other non-traditional species.

At present, fishing is not under quota control.



The Fishery

The fishing season for winter flounder is April 1 to December 31. The approved minimum and maximum mesh size for gillnets is 6.5 and 8.5 inches respectively. As for other flatfish, use of at least 7-7.5 inch mesh is encouraged.

Ten percent of the landings are monitored daily to determine by-catch of regulated species. This often results in closures because of higher than allowed by-catches.

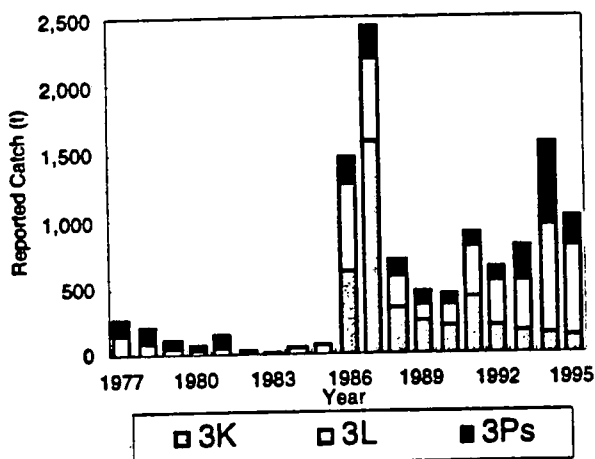
Landings (thousand metric tons)

Year	77-90 Avg.	1992	1993 ¹	1994 ¹	1995 ¹	1996
Can	.5	.6	.8	1.6	1.0	

¹ Provisional

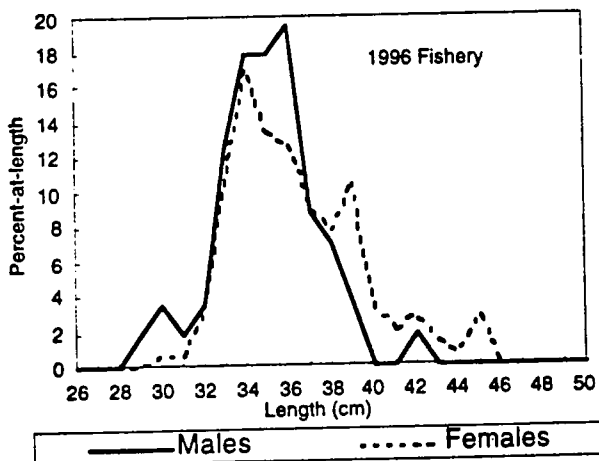
Reported landings, from NAFO divisions. 3K and 3L and Subdivision 3Ps are from a nearshore gillnet fishery. Prior to 1977, reported landings were less than 400 metric tons annually.

A substantial portion of the catch taken for lobster bait may be under-reported. As well, before 1986 blackback and American plaice landings were not differentiated and this likely explains the substantial increase in reported landings beginning in 1986.



The fishery was predominately in Division 3K in the late 1980s. Catch in this area declined to less than 10% of the combined landings in 3KLPs by 1994.

In 1996, for the first time, length frequency information was collected from the fishery. It showed mean lengths of males and females caught to be 35 and 36 cm (13.5 and 14 inches) respectively.



Resource Status

Little is known about the species in the Newfoundland area. It is distributed close to the coast generally no deeper than 40m. As a result, it is seldom taken in research vessel survey trawls and no estimates of biomass are available. The only studies from this area pertain to feeding. The diet of blackback collected off eastern Newfoundland has been shown to be

mainly sea urchins although it was noted that they are opportunistic feeders.

Sources of Uncertainty

Lack of data make it impossible to determine trends in the biomass and information on the general biology of this species around Newfoundland is limited. As well, the likelihood of significant unreported landings make it difficult to estimate removals. Until 1996, there were no data on sizes of the landed fish.

Outlook

This species has been taken in small quantities for many years. Although in recent years effort has increased, closures due to excessive by-catches of regulated species such as cod, pollock or haddock have tended to keep this fishery small. Given the good quality of the flesh coupled with increased interest in non-traditional species, fishing pressure could increase. Possible impacts on the resource cannot be evaluated with existing data.

For More Information

Research Document: Kulka, D.W., E. DeBlois and B. Davis. 1996. Non-traditional groundfish species on the Labrador Shelf and Grand Banks - wolffish, monkfish, white hake and winter (blackback) flounder. DFO Atl. Fish. Res. Doc. 96/97.

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