# CATFISH (WOLFFISH) IN DIVISIONS 2J, 3K, 3L, 3N, 3O AND 3Ps

*Background*

*The commercial catfish (or wolffish) in Newfoundland waters are made up of two different species; the Atlantic (or striped) catfish (Anarhichas lupus) and the spotted catfish (Anarhichas minor). Both species are found on both sides of the Atlantic Ocean. In the northwest Atlantic, they are distributed from Davis Strait to Maine.*

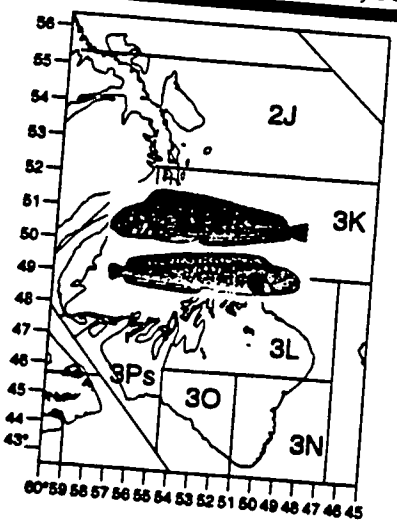
*The spotted catfish inhabits deep waters to beyond 475 meters (260 fathoms) and temperatures of 3.1-4.0°C. The striped catfish is found further south in shallower depths (100-350 meters (55-191 fathoms)) and water temperatures as cold as 0.4°C. Tagging studies conducted on both species indicate little migration although there is some movement between deeper and shallower water by striped catfish. Neither species forms large schools.*

*Catfish in Newfoundland waters, especially spotted catfish, are presumed to grow slowly although information is limited. Both can grow to lengths greater than 100 cm (39 inches).*

*Striped catfish in Newfoundland waters spawn in September, and the entire larval stage is spent close to the location of hatching. Information on spotted catfish is more limited, but they appear to spawn in late autumn or early winter. Some information suggests that the larvae are pelagic.*

*The food of catfish includes a variety of bottom invertebrates as well as small amounts of fish. They will also feed on offal from fishing operations.*

*Catfish are taken as by-catch in trawler fisheries around Newfoundland. Currently the catches are unregulated.*




## The Fishery

In the Canadian offshore fisheries catfish have been taken only as by-catch. The two species together comprised the second most abundant by-catch in the trawler catches after skates. They have also been taken as by-catch in gillnets, and to a lesser extent on longlines.

Landings (thousand metric tons)

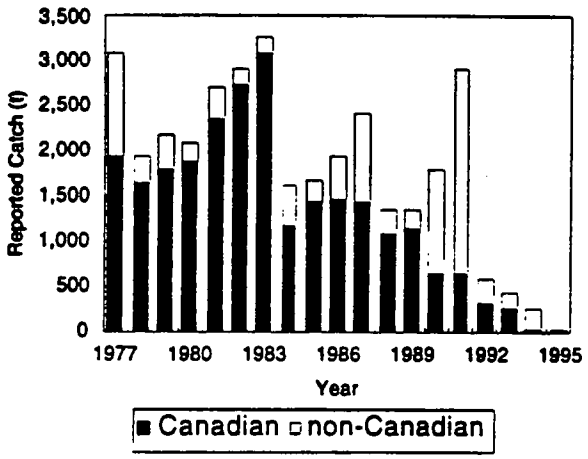
| Year | 77-90 Avg. | 1992 | 1993[1] | 1994[1] | 1995[1] | 1996 |
|---|---|---|---|---|---|---|
| Can. | 2 | .3 | .3 | + | + | |
| Others | .5 | .3 | .3 | .3 | 0 | |
| Total | N/A | .6 | .6 | .3 | + | |

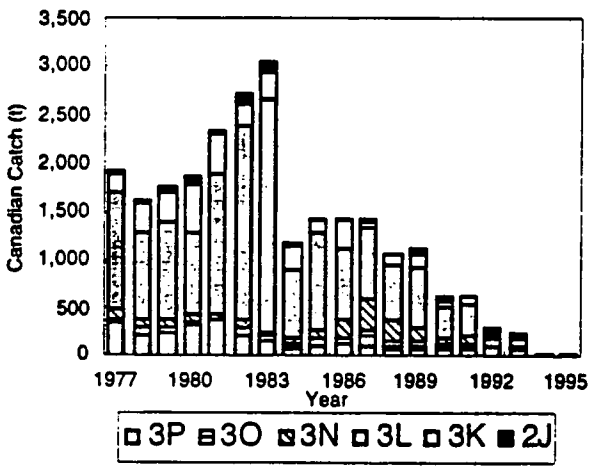
[1] Provisional
+ Catch less than 500 metric tons

Canadian catches in divisions 2J3KLNO and Subdivision 3Ps exceeded 2,000 metric tons in only 3 years since extension of jurisdiction; 1981, 1982 and 1983. In all other years until 1989, catches were about 1,500 metric tons. After 1989 catches gradually declined to only 20 metric tons in 1995. These declines reflect the by-catch nature of this fishery. In most years, most of the catch was reported from 3L.

Non-Canadian catches exceeded 1,000 metric tons only in 1977, 1990 and 1991. In most other years, catches were less than 500 metric tons. Most of the catches in recent years were reported from outside 200 miles in divisions

3LNO, but in earlier years, when there were still foreign allocations inside 200 miles, catches were higher in 2J and 3K. As with the Canadian fleets, non-Canadian catches are taken as by-catch in fisheries directed for other species.

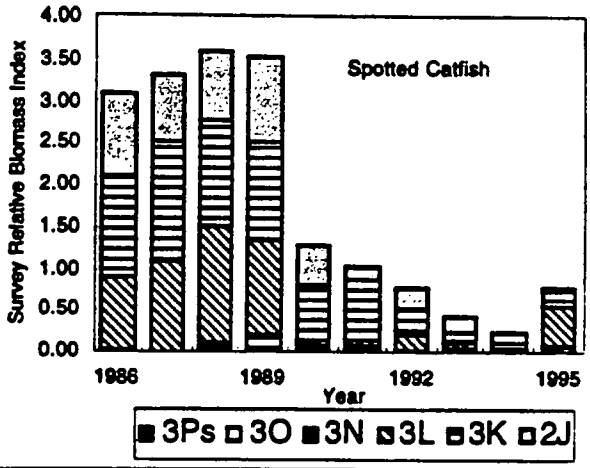


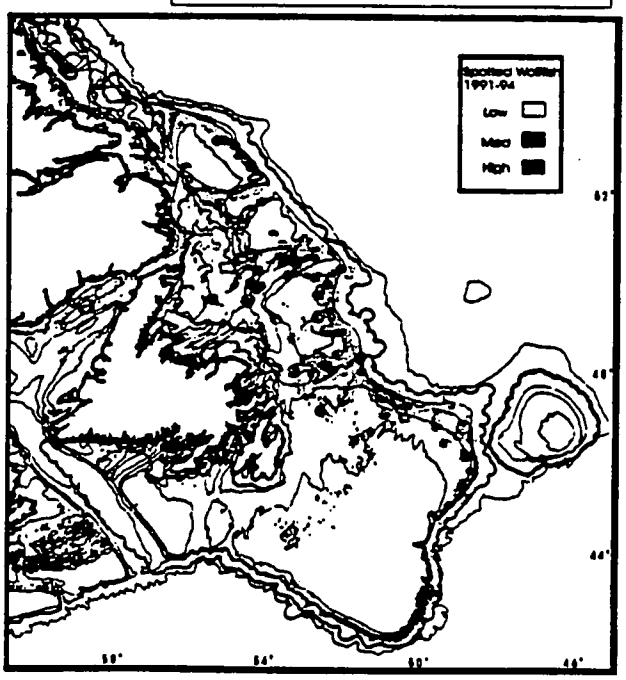



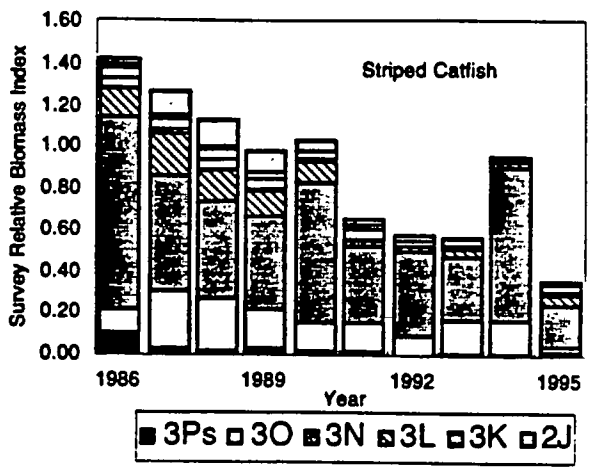

## Resource Status

Little is known about catfish in Newfoundland waters except for results from **annual research surveys.**

Spotted catfish are primarily found in the more northern areas, and are relatively rare south of Division 3L. The survey data indicate a decline between 1989 and 1990, primarily in divisions 2J and 3L. There was some decline in 3K in that year, but further decline occurred later in this division.

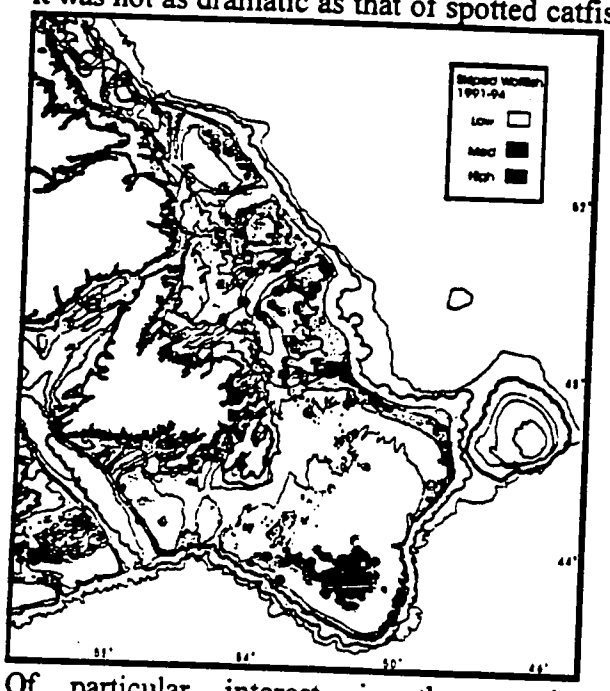





The survey results indicate that striped catfish are most abundant in Division 3N, followed by Division 3O. There was a gradual decline in the

biomass of this species from 1986 to 1995, but it was not as dramatic as that of spotted catfish.



Of particular interest is the persistent concentration in a small area of the southern Grand Banks which straddles the 3N-3O boundary.

## Sources of Uncertainty

Very little is known about catfish in Newfoundland waters although it constituted the second largest by-catch in offshore fisheries through the 1980s. Age, growth, reproduction, mortality, movements and stock structure have not been examined extensively.

## Outlook

Catfish catches have been restricted to by-catch historically. It is possible that the declines observed in the survey estimates are due to these by-catches. There are no indications of interest in any directed fishery at present.

## 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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