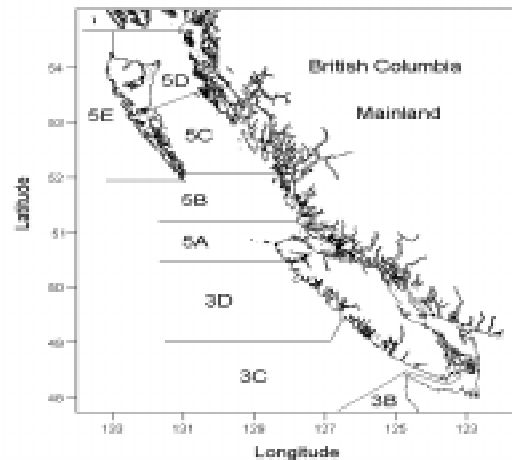




Dover Sole West Coast Vancouver Island (Areas 3C, D) To Queen Charlotte Islands (Areas 5A-E)



Background

The Dover sole (*Microstomus pacificus*) is one of the important flatfishes caught in the commercial trawl fishery off British Columbia. Dover sole range from Baja California to the Bering Sea (Kramer et al. 1995). However, the species is near the northern limit of its commercial abundance off British Columbia.

At least two discrete stocks have been identified off the British Columbia coast (Fargo et al. 1985). The 'southern' stock occupies the area off the west coast of Vancouver Island (Areas 3C,D) while the 'northern' stock occupies the area surrounding the Queen Charlotte Islands (Areas 5C-E). Stock mixing may occur in Areas 5A,B. The adults show a preference for mud substrate and occupy a depth range of 100-1,000 metres.

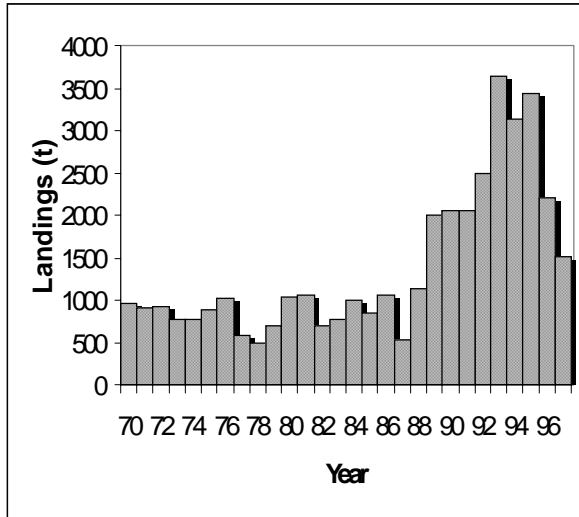
Dover sole live as long as 45 years and first recruit to the commercial fishery at about six to seven years of age. They have evolved to spawn many times over the course of their lifetime and migrate to deepwater to spawn. Males begin to spawn at about four years of age while females begin to spawn at about five-six years of age. This species has an extended pelagic larval phase which can last up to two years.

Directed fishing for Dover sole takes place at fishing grounds throughout the coast with the exception of the Strait of Georgia. It is regulated with individual vessel quotas.

The Fishery

The fishery for Dover sole takes place in late fall and winter at depths of 400-1,000 metres and during the spring and summer at depths of 100-200 metres. The winter fishery occurs predominately on spawning aggregations. The deep-water fisheries off the west coast of the Queen Charlotte Islands began in the late 1970s and off the west coast of Vancouver Island in the late 1980s.

From 1970 to 1987, coastwide landings of Dover sole ranged between 500 to 1,000 t. Landings during this period came almost exclusively from grounds inhabited by the 'northern' stock. Coastwide landings increased to more than 3,000 t in the early 1990s with the development of the deepwater fishery on the west coast of Vancouver Island stock.



Annual landings of Dover sole in B.C. between 1970 and 1997.

Resource Status

The assessments for Dover sole are based on analysis of data from the commercial fishery and biological data collected during research surveys. (Fargo and Kronlund 1997). Dover sole abundance has declined for both stocks in recent years. This is probably a result of an increase in fishing effort on both stocks since the late 1980s.

Dover sole CPUE from research surveys has declined for both stocks in recent years. Changes in stock age composition suggest that the older segment of the population is disappearing. This is indicative of a fishery effect. Area quotas for both stocks have been lowered to prevent the possibility of overfishing.

Outlook

Both of these stocks are fully exploited at the present time. In 1997 the quotas for both stocks were lowered to avert

recent declines in stock abundance. This species is moderately long-lived with a slow turnover rate. The abundance of these stocks should stabilize over the next few years given the reduction in landings.

For More Information Contact:

Contact: Jeff Fargo
Stock Assessment Division
Pacific Biological Station
Nanaimo, B. C. V9R 5K6

Phone:(250) 756-7165
Fax: (250) 756-7053
Email:fargoj@dfo-mpo.gc.ca

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Phone: (250) 756-7208
Fax: (250) 756-7209
Email: miltond@dfo-mpo.gc.ca

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