# Northwest Atlantic



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On Recaptures of Greenland Halibut in Icelandic Waters from Tagging Experiments in West Greenland Fjords

by

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#### Introduction.

Tagging experiments were carried out on Greenland halibut in West Greenland fiords since 1935. In Riget and Boje (1989), a summary of the tagging experiments from 1935 to 1981 was given. A description of a comprehensive tagging experiment in Godthaabsfiord (NAFO Div. 1D) in 1969-70 was given in Riget and Boje (1987). A total of 4041 Greenland halibut were tagged in the experiments 1935-1981 and 594 recaptures have been reported. All recaptures of known location except two, were taken near the tagging site. One of the migrants was tagged in Lichtenau fiord (Div. 1F) in 1954 and recaptured 5 years later northwest of Iceland  $(66^{\circ}30^{\circ}N, 25^{\circ}20^{\circ}W)$ . The second migrant was tagged in Godthaabsfiord in 1964 and recaptured 16 years later west of Dohrn Bank between Greenland and Iceland  $(65^{\circ}28^{\circ}N, 30^{\circ}20^{\circ}W)$ .

In the period 1986-1989 tagging experiments were carried out in some West Greenland fiords from which recaptures in Icelandic waters were reported recently. This paper descripes the long-distance migrations from the recent tagging experiments and relates these to the fishery for Greenland halibut in Icelandic waters. However, the present tagging experiments cannot be considered finished at the moment, and a detailed report of the experiments will be given later.

## Results and discussion.

Table 1 gives data on the tagging experiments in the West Greenland fiords since 1986. All fished were caught by longlines, and generally only fish above 45 cm were tagged. Yellow T-bar tags were used.

During May 1989, two recaptures northwest of Iceland at Vikurall (65°50'N, 26°15'W) were reported from Icelandic trawlers. In May 1990 one recapture was reported from the same position also from an Icelandic trawler. The 3 migrants were tagged in Godthaabsfiord in January 1987. The lengths of the migrants when tagged were 56cm, 57cm and 65cm, respectively. The length range in the Godthaabsfiord experiment is 34-110 cm. All other recaptures (111) from the tagging experiments since 1986 were reported from the tagging locality. Thus, a total of 5 specimens tagged in the southwestern Greenland fiords and recaptured in Icelandic waters, indicate some connection between the Icelandic Greenland halibut stock and those of south West Greenland fiords.

The 3 recent migrants mentioned seem to represent an increase in recapture rate from the Icelandic area. However, the fishery for Greenland halibut in Icelandic waters (ICES Subarea XIV+V) has increased since the sixties, from an annual level of less than 5,000 tons to more than 40,000 tons annually in recent years, and this fact may explain the relative increase in recaptures for this area.

### References.

Riget, F. & J.Boje (1989). Fishery and some biological aspects of Greenland halibut (*Reinhardtius hippoglossoides*) in West Greenland waters. NAFO Sci. Coun. Studies, 13: 41-52.

Riget,F. & J.Boje (1987). Migration and Exploitation of Greenland halibut, Reinhardtius hippoglossoides (Walb.), in the Nuuk area, West Greenland based on tagging experiments in 1969-70. NAFO SCR Doc. 87/34, Ser.No. N1318.

Table 1. Data on the recent tagging experiments in West Greenland fiords.

Month and year		Numbers tagged	Location	NAFO Division
August	1986	43	Jakobshavn	1A
January	1987	839	Godthaabsfiord	1D
August	1987	<b>53</b> 5	Jakobshavn	1A
August	1987	<b>24</b> 1	Umanak	1A
January	1988	120	Kap Farvel	1F
August	1989	634	Upernavik	1A