

## Other finfish in Subarea 1

**Background:** Other finfish in NAFO SA1 refers to Atlantic wolffish (*Anarhichas lupus*), spotted wolffish (*Anarhichas minor*), American plaice (*Hippoglossoides platessoides*) and thorny skate (*Amblyraja radiata*).

### Fishery and Catches:

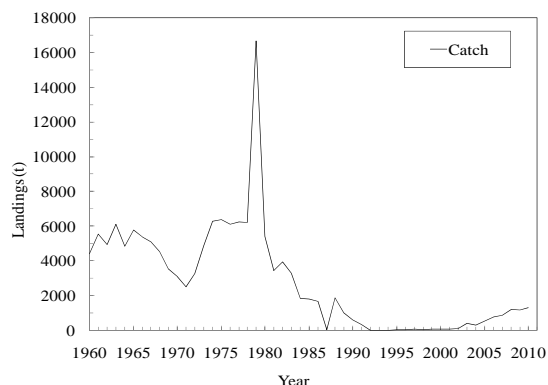
Atlantic wolffish and spotted wolffish.

Catch statistics for both wolffish species are combined, since no species-specific data are available from logbooks or factory landings reports. Catches of wolffish in SA1 were at a level around 5 000 t/yr from 1960 to 1980. Catches then decreased to <100 t/yr during the 1980s and remained low until 2002. Since then catches have increased gradually to 1300 t in 2010.

Recent nominal catches (t) for wolffish.

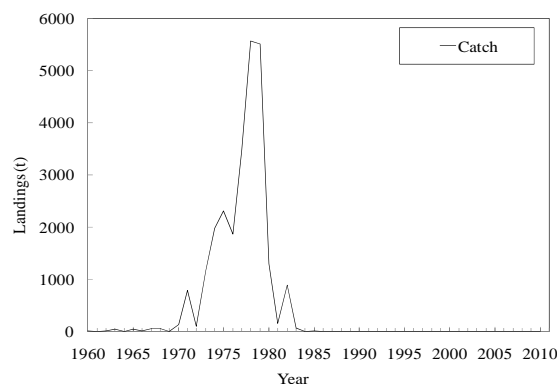
|      | Catch<br>(‘000 t) | TAC (‘000 t) |            |
|------|-------------------|--------------|------------|
|      |                   | Recommended  | Autonomous |
| 2008 | 1.2               | ndf          | 1          |
| 2009 | 1.2               | ndf          | 1          |
| 2010 | 1.3               | ndf          | 1          |
| 2011 |                   | ndf          | 1          |

ndf – No directed fishery, catches restricted to bycatch in other fisheries.



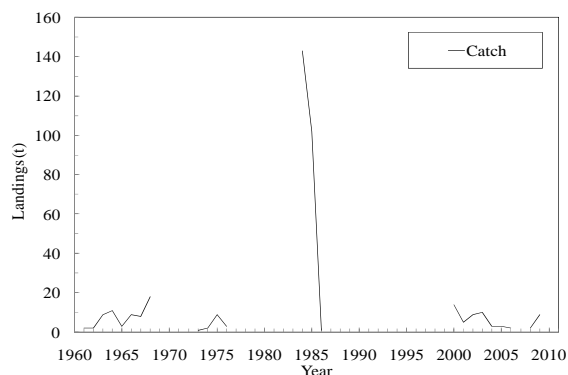
### American plaice

Catches of American plaice developed during the 1970s, decreased in the beginning of the 1980s and has been at a very low level since then. In the past decade there have been no reported catches or bycatches of American plaice in SA1.



### Thorny skate

Catches of thorny skate are reported as skates combined (SKA), but it seems likely that thorny skate constitutes a significant proportion of the reported catches. Catches or reporting seems to have been sporadic but were >100 t/yr in 1984 and 1985.



### Research survey data

**EU-German groundfish survey.** Annual abundance and biomass indices were derived from stratified-random bottom trawl surveys commencing in 1982, covering NAFO 1BCDEF from the 3-mile limit to the 400 m isobaths.

**The Greenland Shrimp Fish survey.** Annual abundance and biomass indices were derived from the random stratified bottom trawl survey commencing in 1992, covering NAFO 1ABCDEF from 50 to 600 m isobaths.

**Assessment:** No analytical assessment could be performed for any of the stocks.

**Fishing mortality:** unknown for all of the stocks.

### Atlantic wolffish

**Biomass:** After an increase in biomass from 2002 to 2005 the indices have decreased again in the EU-

German groundfish survey, and indices are far below the values of the beginning of the time series.

*Recruitment:* Recruitment has been decreasing in the recent 5 years, but recruitment was above average in the preceding decade. The Atlantic wolffish stock in SA1 is mainly composed of small individuals.

*State of the stock:* Although, the Stock of Atlantic wolffish has shown some recovery potential due to increased recruitment and slightly increasing biomass trends in the past decade, the stock remains at a low level.

### **Spotted wolffish**

*Biomass:* Biomass indices for spotted wolffish are currently above average values in the EU-German groundfish survey.

*Recruitment:* Unknown. No new distinct year-classes can be identified in the length distributions in past years, and the increasing biomasses since 2002 may rely on immigration from areas not covered by the surveys.

*State of the stock:* Unknown.

### **American plaice**

*Biomass:* The biomass has been increasing since 2002 in both surveys. Nevertheless, the biomass indices of the EU-German groundfish survey are far below their initial values of the 1980s.

*Recruitment:* Incidents of above average recruitment have been observed since the mid 1990s.

*State of the stock:* The stock of American plaice has shown recovery potential with incidents of higher recruitment and increasing biomass indices in both surveys since 2002. However, the stock remains at a low level.

### **Thorny skate**

*Biomass:* Biomass indices in both surveys are far below their initial values.

*Recruitment:* Unknown.

*State of the stock:* The stock remains at a low level.

**Recommendation:** No directed fishery in SA1 for *Atlantic wolffish*, *American plaice* and *thorny skate* in 2012, 2013 and 2014. By-catches of these species should be kept at the lowest possible level.

Scientific Council was unable to provide advice on the catch level for spotted wolffish.

**Reference points:** For all of the stocks Scientific Council was unable to propose reference points for Atlantic wolffish, spotted wolffish, American plaice and thorny skate in SA1.

**Special comments:** Scientific Council noted that a differentiation of the species of wolffish in landing reports and logbooks could improve the knowledge of the stocks of wolffish.

These stocks will next be assessed in 2014