

b) Northern shrimp in Denmark Strait and off East Greenland

Advice October 2017 for 2018

Recommendation

In 2016 the stock remained at a low level, comparable to previous years, and there is no new information to indicate a change in stock status. SC therefore reiterates its advice that catches should not exceed 2 000 t.

Management objectives

No explicit management plan or management objectives have been defined by the Government of Greenland.

| Objective | Status | Comment/consideration |
|------------------------------|--------|--------------------------------------------------------------------|
| Apply Precautionary Approach | ● | B_{lim} is defined. No fishing mortality reference point defined |

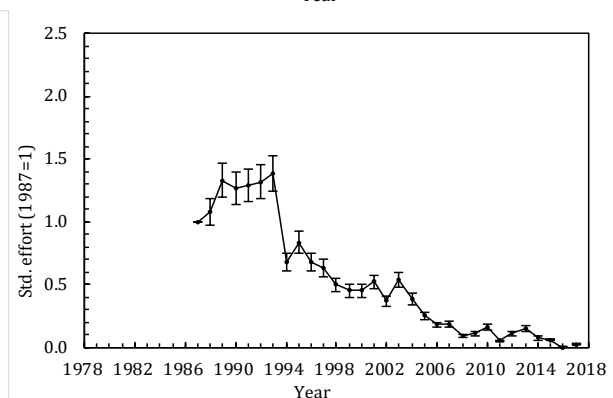
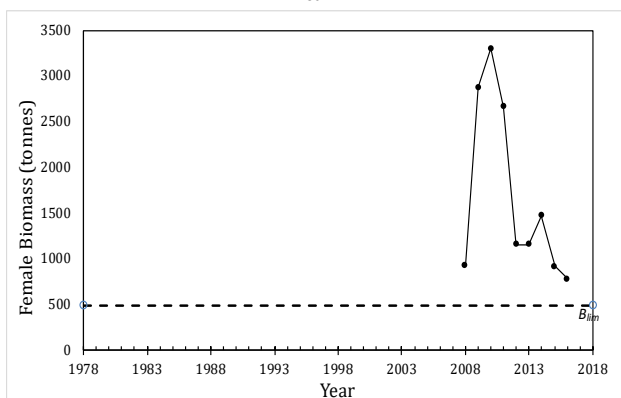
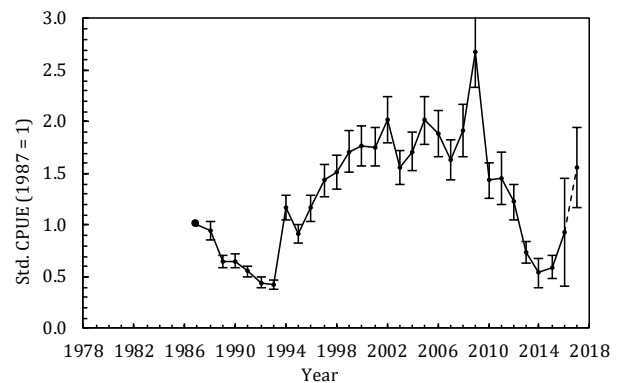
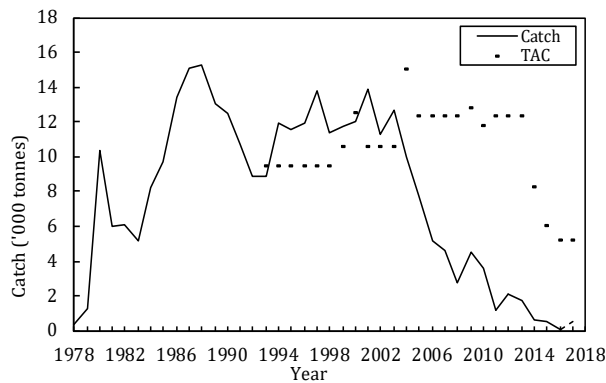
● Intermediate

Management unit

The shrimp stock is distributed off East Greenland in ICES Div. XIVb and Va and is assessed as a single population.

Stock status

The stock size remained at a very low level (relatively close to B_{lim}) in 2016 despite several years of very low exploitation rates. There is no new information to indicate a change in stock status.



Reference points

Scientific Council considers that a female survey biomass index of 15% of its maximum observed level provides a proxy for B_{lim} (SCS Doc. 04/12). This corresponds to an index value of 495 t.

Projections

Quantitative assessment of risk at various catch options is not possible for this stock at this time.

Assessment

Advice is based on qualitative evaluation of biomass indices in relation to historic levels.

Evaluation of stock status is based upon interpretation of commercial fishery and research survey data. The trends in the survey and the standardized CPUE have been similar since the start of the survey, however they diverged in 2016. Since 2015, this has been an opportunistic fishery with vessels stopping off on route between other fishing grounds. This may indicate that the CPUE may no longer be a reliable indicator of the stock status. No survey was carried out in 2017.

Human impact

Mainly fishery related mortality has been documented. Other sources (e.g. pollution, shipping, oil-industry) are considered minor.

Biological and Environmental Interactions

Cod is an important predator on shrimp. The cod stock has been increasing in East Greenland waters until recently, but decreased in 2016.

Fishery

Shrimp is caught in a directed trawl fishery. The fishery is regulated by TAC and bycatch reduction measures include move-on rules and Nordmøre grates.

Recent catches were as follows:

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------------------|-------|-------|-------|-------|-------|------|------|------|------------------|
| Enacted TAC | 12835 | 11835 | 12400 | 12400 | 12400 | 8300 | 6100 | 5300 | 5300 |
| SC Recommended TAC | 12400 | 12400 | 12400 | 12400 | 12400 | 2000 | 2000 | 2000 | 2000 |
| NIPAG | 4555 | 3602 | 1199 | 2109 | 1717 | 622 | 576 | 49 | 557 ¹ |

¹ To July 2017

Effects of the fishery on the ecosystem

Measures to reduce effects of the fishery on the ecosystem include move-on rules to protect sponges and corals.

Source of Information

SCR Doc. 16/045, 17/057