# Northern Shrimp in Division 3M

Advice September 2015 for 2016-17

### Recommendation

No directed fishery for 2016 and 2017.

## **Management objectives**

No explicit management plan or management objectives defined by Fisheries Commission. General convention objectives (GC Doc. 08-03) are applied. Advice is based on qualitative evaluation of biomass indices in relation to historic levels, and provided in the context of the precautionary approach framework (FC Doc. 04/18).

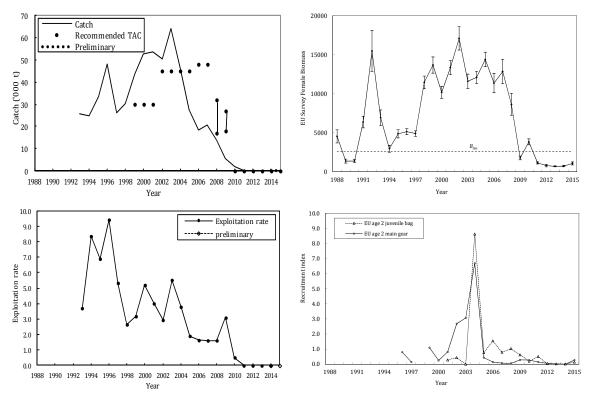
Convention objectives	Status	Comment/consideration		
Restore to or maintain at $B_{msy}$		Stock below B <sub>lim</sub>		OK
Eliminate overfishing		No directed fishery		Intermediate
Apply Precautionary Approach	0	$B_{lim}$ defined. No fishing mortality reference point defined		Not accomplished
Minimise harmful impacts on living marine resources and ecosystems		No directed fishery	0	Unknown
Preserve marine biodiversity	0	Cannot be evaluated		

# Management unit

The Northern Shrimp stock on Flemish Cap is considered to be a separate population.

#### Stock status

Following several years of low recruitment, the spawning stock has declined, and has remained below  $B_{lim}$  since 2011. Due to continued poor recruitment there are concerns that the stock will remain at low levels.



# Reference points

Scientific Council considers that a female survey biomass index of 15% of its maximum observed level provides a proxy for  $B_{lim}$  (2564) (SCS Doc. 04/12).

## **Projections**

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

#### Assessment

No analytical assessment is available. Evaluation of stock status is based upon fishery and research survey data.

This stock is now assessed biennialy. The next full assessment is currently scheduled for 2017.

Human impact

Low fishery related mortality due to moratorium and low bycatch in other fisheries. Other sources (e.g. pollution, shipping, oil-industry) are considered minor.

Biological and Environmental Interactions

The drastic decline of shrimp biomass since 2007 correlates with the increase of the cod stock in Div. 3M. It is uncertain whether this represents a causal relationship and/or the result of an environmental factor.

Results of modelling suggest that, in unexploited conditions, cod would be expected to be a highly dominant component of the system, and high shrimp stock sizes like the ones observed in the 1998 – 2007 period would not be a stable feature in the Flemish Cap.

# **Fishery**

This fishery is effort-regulated. The effort allocations were reduced by 50% in 2010 and a moratorium was imposed in 2011. Catches are expected to be close to zero in 2015.

Recent catches and agreed effort were as follows:

	2008	2009	2010	2011	2012	2013	2014	2015
NIPAG	13 000	5 000	2 000	0	0	0	0	01
STATLANT 21	13431	5374	1976	0	0	0	0	
Effort (Agreed Days)	10555	10555	5227	0	0	0	0	
<sup>1</sup> To September 2015				•	•	•	•	•

# Effects of the fishery on the ecosystem

No fishery.

**Special comments** 

None

Source of Information

SCR Doc. 15/047