

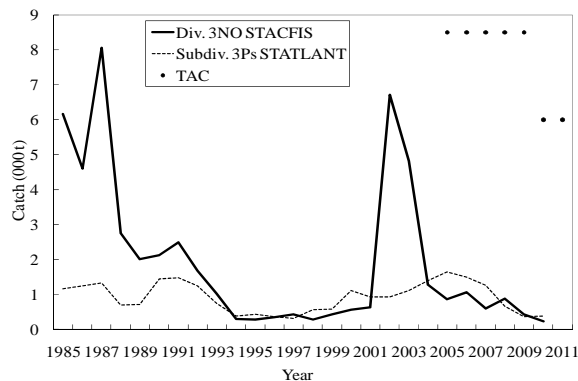
White hake in Divisions 3NO

Background: The stock area, defined by Scientific Council as Div. 3NOPs, is mainly concentrated in southern Subdiv. 3Ps and on the southwestern Grand Bank. Scientific Council is asked to provide advice on the portion of the stock in Div. 3NO only.

Fishery and Catches: Catches in Div. 3NO peaked in 1985 at 8 100 t, then declined from 1988 to 1994 (2 090 t average). Average catch was low in 1995-2001 (464 t), then increased to 6 718 t and 4 823 t in 2002 and 2003, respectively, following recruitment of the large 1999 year class. Total catch decreased to an average of 767 t in 2005-2009, and was 226 t in 2010.

Catches of white hake in Subdiv. 3Ps were at their highest in 1985-1993, averaging 1 114 t, decreasing to an average of 668 t in 1994-2003. Subsequently, catches in Subdiv. 3Ps averaged 1 440 t in 2004-2007, and 443 t average in 2008-2010.

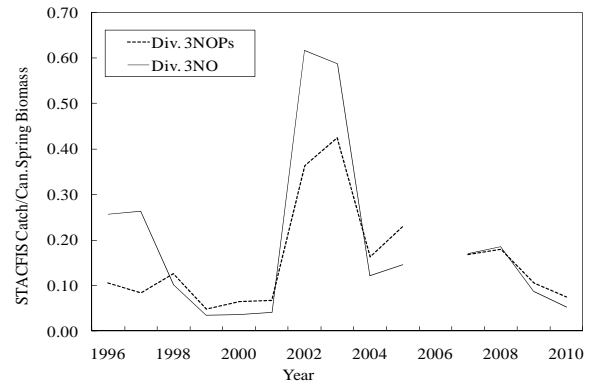
Year	Catch (000 t)			Div. 3NO TAC ('000 t)
	Div.3NO STACFIS	Subdiv.3Ps 21	Subdiv.3Ps 21	
2008	0.9	0.9	0.6	8.5
2009	0.4	0.5	0.3	8.5
2010	0.2	0.2	0.4	6
2011				6



Data: Length frequency data from the Canadian fishery (1994-2010), EU-Spain (2002, 2004), EU-Portugal (2003-2004, 2006-2010), and Russian Federation (2000-2007) were available. Biomass and abundance indices were available from annual Canadian spring bottom trawl surveys in Div. 3NOPs (1972-2010), autumn in Div. 3NO (1990-2010), and EU-Spain Div. 3NO spring surveys in the NAFO Regulatory Area (2001-2010).

Assessment: No analytical assessment was possible.

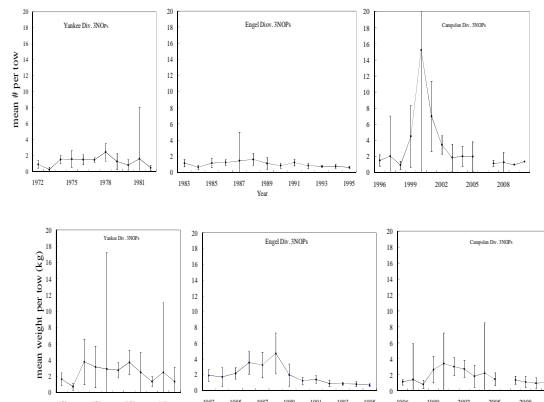
Fishing Mortality: Relative fishing mortality (STACFIS catch/Canadian spring biomass) has fluctuated, but increased considerably for 2002-2003. Current estimates of Relative F are comparable to levels observed from 1996-2001.



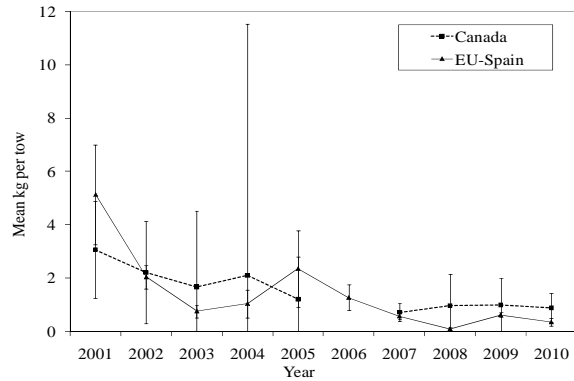
Recruitment: The 1999 year-class was large, but no large year class has been observed since then.

Biomass: The biomass of this stock increased in 2000 with the large 1999 year-class. Subsequently, the biomass index has decreased and remains at levels comparable to the beginning of the Canadian Campelen spring time series in 1996-1999.

Canadian Spring Survey



Comparison of the Canadian spring survey in all of Div. 3NO and the Spanish Div. 3NO survey in the NRA show that both series have similar temporal trends.



State of the Stock: The biomass increased in 2000 with the large 1999 year-class. Subsequently, the biomass index has decreased and remains at levels comparable to the period 1996-1999.

Recommendation: Given the current low level of recruitment, Scientific Council advises that the current TAC of 6 000 t is unrealistic and that catches of white hake in Div. 3NO in 2012 and 2013 should not exceed their current levels.

Reference Points: Reference points with respect to a precautionary approach for this species have not been determined.

Special Comments: The next assessment of this stock will be in 2013.

Sources of Information: SCR Doc. 11/07, 22; SCS Doc. 11/05, 07, 09.