Comments from reviews and assessments of cetacean stocks by NAMMCO

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Assessment – review/preliminary – none

Abbreviations: abund, abundance; adv, advice; ASAP, as soon as possible; ass, assessment; cal, calculated; Can, Canada; cap, capacity; car, carrying; cent, century; cont, continued; curr, current; DD, data deficient; depl, depleted *or* depletion; dev, develop; distr, distributed *or* distribution; doc, document; E/W/S/N, east/west/south/north; EGI: formerly used man. area for Fin whales; est, estimate *or* estimated; expl, exploitation *or* exploited; freq, frequent; gen, genetic; GL, Greenland; hist, historic; id, identity; incl, included; incr, increase *or* increasing; k, thousand; man, management; min, minimum; MSY, maximum sustainable yield; par, parameters; pop, population; pos, possibility; prob, probably *or* probability; prod, production; prot, protection; recom, recommendation; rel, relation; repl, replacement; repr, reproduction; sep, separate; stats, statistics; subst, substantially; sust. sustainable; tot, total; unrep, unreported; w/, with; y, years.

[1]Eastern High Arctic – Baffin Bay (Somerset Island) and West Greenland. This stock consists of aggregations summering in the Canadian High Arctic Archipelago, and, to a minor extent, in Smith Sound. In winter, the stock is divided into a portion that resides in the North Water polynya and a larger portion that resides in coastal ice-free areas along the Baffin Bay sea ice edge in West Greenland (GROM 2017)

Fin whale	1999	2000	2003	2004	2005	2006	2010	2015	2017
WG (man. adv. usually provided by IWC (ASW) and not NAMMCO)						Review by joint NAMMCO/IWC WS			
EG WI	EGI. Annual strikes: ≤200 (10y), cont. research important	EGI. None	EGI. Annual strikes of ~150	Review of progress and provide research recom. for all stocks and areas	EGI. No change from previous advice	EGI. No change from previous advice	Annual strikes ≤155 from WI (5y). Research recom.	Annual strikes ≤146 from WI (2016-2017)	Annual strikes 161 from WI (2018-2025)
Faroes - W Norway	None	F-EEZ: Insufficient info on stock id for ass. & man. advice. Stock likely heavily depleted Research recom.	F-EEZ: Same conclusion as in 2000: Stock likely heavily depleted. Research recom.		F-EEZ same conclusion as in 2000 & 3	F-EEZ same conclusion as previously. Research recom.on stock structure	None	None	Annual strikes of 48 from EI+F (2018-2025)
N Norway	None	None	Research recom.		Stock likely depleted. Research recom.	Low abund. est., high hist. harvest: stock likely depleted. Research recom.	None	None	None

Minke whale	1997	1998	2003	2009	2010	2011	2015	2017
West (man. adv. usually provided by IWC (ASW) and not NAMMCO)							Review of IWC advice	
Central Medium Area (CMA), including CIC sub-area	Annual strikes: ≤185(CIC) + ≤107 (CM) (Total CMA≤ 292)	Close to car cap, present removals do not adversely affect the stock, same conclusion for CIC area	Annual strikes ≤400 annually = >70%. => precautionary advice. Either CIC or the whole CMA	Total annual strikes ≤200 (CMA), i.e. from IS and others (short term)	Annual strikes: ≤216 (CIC) + ≤121 (CM) (Total CMA≤ 337, 2011-16 advice)	Annual strikes: ≤229 (CIC, 2011-2016)	Annual strikes: ≤224 (CIC, 2016-18)	Annual catch: ~360 (lower bound, CMA for sust. Catch; 217 in CIC
East (man. adv. usually provided by NO and not NAMMCO)							Review of IWC advice	

Humpback whale	2010	2015	2017
West Greenland (man. adv. usually provided by IWC (ASW) and not NAMMCO)	Probable pop. increase even w/annual strikes of ≤20 annually (5y, 2010-2015)	Endorsed IWC advice of ≤10 annually for 2016-17.	Annual strike of ≤25 (2019-2024)
Sei whale	2010	2011	
North Atlantic	Review of available data off Greenland, Iceland-Faroes and Norway. Needs research: abund. est., sightings surveys, satellite tagging	Needs optimized surveys. Ass. should be feasible after the 2007 surveys	

Bottlenose whale	1993	1995	
North Atlantic	Explore possibility of modelling pop. trajectory by catch series and abund. est.	Faroes: no noticeable effect from traditional coastal drive hunt; removals of <300 annually ok	

Pilot whale	1997	2009	2011	2012	2020
NE Atlantic	SC advice based on 1996 ICES ass. Present catch level sustainable	Recom. on how to improve the 2007 abundance estimates for GL and IS/FO	Recom. for research	Short term advice. Present catch level sust.	Assessment expected

Harbour porpoise	1999	2013	2018	2019
Greenland	Require better info on stock structure, distribution, ++++	No management advice. Too much uncertainty in catch statistics, but high catches and ass. needed ASAP	Review	Assessment expected
Norway	Require better info on stock structure, distribution++++	High by-catch & no pop est. => Recom.: samples from by-catch, tagging, tracking & genetic studies, + abund. surveys	Assessment looking at sustainability of by-catch	Review of assessment expected
Iceland			Assessment looking at sustainability of by-catch	Review of assessment expected
Faroes			Assessment looking at sustainability of removals	Review of assessment expected

Killer whale	1993	1994-2017
North Atlantic	No conclusive evidence on stock id, no assessment possible, needs more data	Same conclusions, Review asked for SC 25.

Beluga	1999	2000	2001	2004	2005	2009	2012	2015	2017 WG	2017 GROM
Eastern High Arctic[1]	Large pop. size but sub-stocks overexpl. and declining in WGL	WGL: Subst. depl., present harvests > sust. yield; stock extinct within 20 y. Harvest options for halting depletion	WGL: No change (stock depleted to 20%-25% of car. cap., present sust. yield ~100 beluga/y)	Needs new survey results	WGL: Subst. depleted. Recom.: catch limits distr. over 3 hunting areas	Stock decline until 2004. Decline in catch (> 400 to <200 beluga/y) ≈ 8% incr. by 2009	No new data. Curr. removals (from 2009) = sust.	Reiterates advice from 2005 and 2012 (seasonal closures)	Est. decline (21,180 in 1970, 8,470 in 2004), => incr. to 11,610 in 2023 (catches of 225). Reiterate previous adv. (valid to 2021)	Trend unclear, large stock, removals sustainable. Low concern
East Greenland	Likely animals from Svalbard, few catches per decade, likely not threatened	(Not considered a stock, animals from Svalbard)								
Svalbard - Barents Sea	Protected since 1961, recovering. Threats from increased activities	None	None	None	None	None	None	None	No ab. est./trend info; status unknown.	No ab. est./trend info; status unknown. Moderate concern as DD. 1st-ever survey 2018.

Narwhal	1999	2000	2001	2004	2005	2009	2012	2015	2017 WG	2017 GROM
Baffin Bay (several stocks)	Wintering ground for coastal narwhals, exploited in all coastal areas	None	Insufficient info, no possibility for providing man. advice, but concerns	Assess. attending completion of 3yr survey program in 2004.	E. Baffin: abund. est. not accepted; no adv. on the sust. of catch. No info on seasonal distr.=> needs new abund., + abund. for Melville Bay + seasonal distr. studies	2007 & 2008 surveys => number of narwhals in Inglefield Bredning has fluctuated, + estimate for Melville Bay. Annual removal of 185-378 (5y) = 50%-95% prob. of pop. incr.	Overall review. Reiterates 2009 adv. (Inglefield=85, Melville=8, Uummannaq=85, Disko=59)	Stable, maybe incr. trend in some areas. Most areas >MSY, except Inglefield Br. and Melville Bay. Catch allocation provided following the new catch allocation model. Reiteration of advice on seasonal closure for WG.	Moderate concern: lack of data on movements/stock structure, pos. of several summer stocks	Jones and Smith Sounds and Ingefield Bredning – Low concern: small to medium sized stock with low to no removals, general habitat concerns related to climate change, future development Melville Bay - High concern: small stock, overharvest
West Greenland (several stocks)	A mix of stocks, wintering/ summering grounds of different status.	Research needed to est. sust. harvest levels	Insufficient info for providing man. advice, but concerns	Depl. to ~1/4 of pre-harvest abund. Total removals < 135	Decl. since 1986, highly depleted, safe harvest levels being as low as 15 to 75 whales per year for WG					
East Greenland (several stocks)	Review of stock structure	None	None	None	Ad hoc modelling: harvest levels not sust. Needs further research to validate. Insufficient information to carry out assessments for other areas of EGL	1st ever man. advice. Est. decline since 1955, annual takes of 50-73 narwhal => 80%-95% prob. that takes are <90% of the MSY	Recom.: for man. purp. these should be separated into different stocks	Separate man. for Ittoqqortormiit and Tasilaq/Kangerlussuaq (different hunting areas). Lower catch for Ittoqqortormiit. Needs new survey in EGL	Annual strike <10 in Kangerlussuaq & Ittoqqortormiit, None S of 68°N. Pop. decl. confirmed by model est. Recom.: 3 man. areas for EGL (Tasiilaq, Kangerlussuaq & Ittoqqortormiit) + more info on distr./mov.	EG - High concern: Low abundance, data deficient, possibly several stocks, overharvest, climate change related habitat concerns. NEG - Medium concern: data deficient, likely several stocks, climate change related concerns, protected
Svalbard	No info. on size & trends, no expl., likely not threatened	None	None	None	None	None	None	None	Abund. est. 837 (2015). Moderate concern	Medium concern: data deficient likely several stocks, protected