Supplementary Appendix S3 - Overview of parameter for multi-stanza groups

Table S3-1. Overview of parameters for multi-stanza groups for the balanced models for year 1950. K is the growth coefficient of the von Bertalanffy growth equation, Recruitment power is a parameter to adjust the recruitment –spawning stock relationship, BA is biomass accumulation, i.e. change in biomass from one year to another, W_{mat} is weight at maturity and W_{inf} is the weight at infinity (infinite age). Default W_{mat}/W_{inf} is 0.09. Leading group means that parameters (B and Q/B) for other stanza of the multistanza group are adjusted according to the values of the leading group (stanza). Transition age (Tr. Age) is transition age (month) from one stanza to another.

Gr. no	Multi-stanza group	K ($year^{-1}$)	Recr. power	BA/B	W_{mat}/W_{inf}	Leading (P/B)	Leading (Q/B)	Tr. age (mon.)	Source
29-30	Northeast Arctic cod	0.11^a	1.0	0.110	0.09	Age 3+	Age 3+	36	a) Calculated from lengths at age in year 2000 (ICES 2019)
31-32	Coastal cod	0.20^b	1.0	0.04	0.09	Age 2+	Age 2+	24	b) Calculated from lengths at age in year 2000 (ICES 2016)
33-34	Saithe	0.19^c	1.0	0.0	0.09	Age 3+	Age 3+	35	c) (Beverton & Holt 1959)
35-36	Haddock	0.15^d	1.0	0.39	0.09	Age 3+	Age 3+	36	d) Calculated from lengths at age in year 2000 (ICES 2016)
38-39	Greenland halibut	0.056^e	0.8^f	0.0	0.09	Large	Large	56	e) (Pauly 1978) f) adjusted to account for "egg source" outside the modelled area
50-51	Capelin	0.30^g	1.0	0.12	0.15^h	Age 3+	Age 3+	30	g) calculated from length at age from (Gjøsæter & Monstad 1985) h) Calculated to fit maturation age of 3 years
52-53	Polar cod	0.23^i	1.0	0.0	0.09^j	Age 2+	Age 2+	21	i) (Gjøsæter 1973) j) Calculated to fit maturation age of 2.5 years (Hop & Gjøsæter 2013)
59-60	Redfish	0.24^k	1.0	0.0	0.37^l	Large	Large	60	k) Adjusted to cover consumption of small redfish group l) Deepsea Redfish (*S. mentella*) (Skaret & Pitcher 2016)
102-104	Red King crab	0.245^m	1.0	0.0	0.39^n	Large	Large	25, 65	m) (Pedersen et al. 2018) n) Calculated to fit maturation age equal to 65 months

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