## Errata to:

Johnson, K.F., A.M. Edwards, A.M. Berger and C.J. Grandin. 2021. Status of the Pacific Hake (whiting) stock in U.S. and Canadian waters in 2021. Prepared by the Joint Technical Committee of the U.S. and Canada Pacific Hake/Whiting Agreement, National Marine Fisheries Service and Fisheries and Oceans Canada. 269 p.

Table 23 in the above document has incorrect values in two columns, **Total biomass** and **Age 2+ biomass**. The values reported were maximum likelihood estimates instead of Markov Chain Monte Carlo medians. The following table is correct.

The credible intervals in the original related Table 24 were correct, as were the equivalent tables to Table 23 in recent Pacific Hake stock assessment documents.

**Table 23.** Time series of median posterior population estimates from the base model. Relative spawning biomass is spawning biomass relative to the unfished equilibrium ( $B_0$ ). Total biomass includes females and males of ages 0 and above. Age-2+ biomass includes females and males ages 2 and above. Exploitation fraction is total catch divided by total age-2+ biomass. Relative fishing intensity is  $(1-SPR)/(1-SPR_{40\%})$ . A dash (–) indicates a quantity requiring 2021 catch which has not taken place yet. [Corrected version].

Year	Female spawning biomass (thousand t)	Relative spawning biomass	Total biomass (thousand t)	Age-2+ biomass (thousand t)	Age-0 recruits (millions)	Relative fishing intensity	Exploitation fraction
1966	832	50.1%	2,192	2,006	1,517	50.9%	6.9%
1967	831	50.5%	2,265	2,053	4,320	69.3%	10.4%
1968	824	50.5%	2,405	2,046	2,868	50.6%	6.0%
1969	919	56.1%	2,727	2,505	629	62.0%	7.2%
1970	1,083	66.9%	2,911	2,734	8,423	68.3%	8.6%
1971	1,117	68.9%	3,160	2,529	760	51.1%	6.1%
1972	1,184	72.8%	3,592	3,526	487	39.0%	3.3%
1973	1,529	94.0%	3,647	3,529	5,589	42.9%	4.6%
1974	1,507	92.6%	3,671	3,257	323	49.1%	6.5%
1975	1,733	106.4%	4,615	4,480	1,707	54.2%	6.2%
1976	2,136	131.1%	4,879	4,732	186	47.0%	5.9%
1977	1,843	112.9%	4,573	4,212	6,248	31.0%	3.1%
1978	1,557	95.5%	3,727	3,360	121	31.2%	2.8%
1979	1,623	99.6%	4,212	4,135	1,302	33.7%	4.0%
1980	1,632	99.8%	4,439	3,618	16,474	26.1%	2.5%
1981	1,487	91.0%	4,660	3,244	243	37.8%	4.7%
1982	1,531	93.6%	5,174	5,134	284	31.6%	2.4%
1982	2,153	131.8%	4,934	4,885	502	30.4%	2.5%
1983	2,133	135.5%	5,173	4,689	13,360	34.9%	3.4%
1985	1,915	117.1%	6,034	4,170	120	23.7%	3.0%
1986	2,007	122.5%	6,030	6,008	163	41.5%	4.1%
1980						46.5%	
	2,343	143.0%	5,436	5,271	6,358		4.8%
1988	2,271	138.5%	5,528	4,778	2,045	46.8%	6.8%
1989	1,877	114.3%	5,049	4,825	107	54.2%	7.3%
1990	1,989	121.0%	4,641	4,563	4,218	47.7%	6.8%
1991	1,836	111.6%	4,426	3,946	1,208	71.9%	8.2%
1992	1,515	92.1%	3,777	3,644	119	61.9%	7.4%
1993	1,209	73.5%	2,855	2,792	3,135	52.6%	6.2%
1994	1,169	71.0%	2,849	2,504	3,298	63.6%	16.4%
1995	1,004	61.1%	2,830	2,523	1,205	55.6%	10.9%
1996	983	59.8%	2,714	2,587	1,835	70.4%	11.6%
1997	1,019	62.0%	2,577	2,424	1,050	72.1%	13.9%
1998	864	52.6%	2,128	2,027	1,940	86.8%	14.3%
1999	727	44.2%	2,115	1,706	12,946	96.6%	18.3%
2000	787	47.9%	4,001	2,040	312	67.8%	15.0%
2001	1,090	66.5%	4,098	4,068	1,243	68.2%	4.8%
2002	1,857	113.4%	4,387	4,313	31	48.4%	4.0%
2003	1,731	105.6%	3,811	3,782	1,740	44.1%	4.8%
2004	1,374	83.8%	3,147	2,995	56	72.3%	10.5%
2005	1,074	65.5%	2,552	2,505	2,813	69.9%	13.7%
2006	875	53.4%	2,254	1,929	2,037	82.2%	18.5%
2007	689	42.2%	1,811	1,739	23	84.9%	14.5%
2008	703	43.1%	1,865	1,783	5,578	89.1%	18.7%
2009	607	37.3%	1,622	1,311	1,464	77.6%	12.2%
2010	605	37.2%	2,210	1,874	16,149	92.7%	11.6%
2011	747	46.0%	2,932	1,840	442	87.1%	16.2%
2012	976	60.3%	3,739	3,674	1,543	66.5%	5.3%
2013	1,785	110.0%	4,330	4,168	336	63.8%	7.1%
2014	1,889	116.3%	4,391	4,270	8,908	60.8%	7.3%
2015	1,424	87.6%	3,688	3,150	42	45.5%	5.5%
2016	1,260	77.4%	3,742	3,688	4,828	72.6%	8.1%
2017	1,593	97.9%	4,159	3,589	2,133	77.9%	13.2%

Continued on next page ...

... Continued from previous page

Year	Female spawning biomass (thousand t)	Relative spawning biomass	Total biomass (thousand t)	Age-2+ biomass (thousand t)	Age-0 recruits (millions)	Relative fishing intensity	Exploitation fraction
2018	1,498	91.7%	4,253	3,922	179	74.7%	11.1%
2019	1,486	90.3%	3,623	3,569	665	74.9%	11.4%
2020	1,300	78.8%	2,970	2,831	820	65.9%	12.6%
2021	981	59.2%	2,554	2,284	810	_	_