

2022 SAFE Report for the Pribilof Islands Blue King Crab Fisheries of the Bering Sea and Aleutian Islands Regions

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Summary

The Pribilof Islands blue king crab (PIBKC) assessment is on a biennial cycle. 2022 is the “off” year in the cycle, so only an update to determine whether or not overfishing occurred in 2021/22 is presented here. The next full assessment will occur in 2023. The most recent full assessment was conducted in May 2021 (Stockhausen, 2021). This report updates that assessment with final retained catch and bycatch mortality estimates in the directed fishery, other crab fisheries, and the groundfish fisheries to determine the final status of whether or not overfishing occurred during the 2021/22 crab fishery year (July 1, 2021-June 30, 2022). The 2021 SAFE Report determined the overfishing limit (OFL) for PIBKC to be 1.16 t, with an acceptable biological catch (ABC) of 0.87 t. Following completion of the 2021/22 crab fishery year, data on retained catch and bycatch in the crab fisheries was obtained from the Alaska Department of Fish and Game (ADFG), and from the NMFS Alaska Regional Office (via the Alaska Fisheries Information Network [AKFIN]) for bycatch in the groundfish fisheries. The directed fishery has been closed since 1999/2000 because it has been in an overfished status with mature male biomass estimated to be below $0.5 \cdot MSST$; thus no retained catch or bycatch occurred in the directed fishery in 2021/22. Also, no bycatch of PIBKC was observed in other crab fisheries (i.e., snow crab, Tanner crab west of $166^{\circ}W$ longitude; Benjamin Daly, ADFG, pers. comm., July 13, 2022). Bycatch in the groundfish fisheries totaled 0.139 t across all gear types in 2021/22. After applying gear-specific discard mortality rates, this amounted to 0.102 t total catch mortality. More details on observed bycatch of PIBKC in the 2021/22 groundfish fisheries is provided in Appendix A. Because total fishery-related mortality (0.102 t) was less than the OFL for 2021/22 (1.16 t), **overfishing did not occur** on this stock in 2021/22.

The following two tables update the management performance tables presented in the 2021 SAFE Report with the final fishing mortality estimates for 2021/22:

Table 1: Management performance; all units in metric tons.

Year	MSST	Biomass (MMBmating)	TAC	Retained Catch	Total Catch Mortality	OFL	ABC
2018/19	2,053	230	closed	0	0.400	1.16	0.87
2019/20	2,049	180	closed	0	0.420	1.16	0.87
2020/21	2,049	181	closed	0	0.000	1.16	0.87
2021/22	NA	180	closed	0	0.102	1.16	0.87
2022/23	NA	180	NA	NA	NA	1.16	0.87

Table 2: Management performance; all units in thousands of lbs.

Year	MSST	Biomass (MMBmating)	TAC	Retained Catch	Total Catch Mortality	OFL	ABC
2018/19	4,526	507	closed	0	0.88	2.56	1.92
2019/20	4,517	397	closed	0	0.93	2.56	1.92
2020/21	4,517	399	closed	0	0.00	2.56	1.92
2021/22	NA	397	closed	0	0.22	2.56	1.92
2022/23	NA	397	NA	NA	NA	2.56	1.92

References

Stockhausen, W.T. 2021. 2021 Stock Assessment and Fishery Evaluation Report for the Pribilof Islands Blue King Crab Fisheries of the Bering Sea and Aleutian Islands. North Pacific Fishery Management Council, 605 W. 4th Avenue, Suite 306, Anchorage, AK 99501-2252.