

BETWEEN-POPULATION VARIABILITY IN BODY SIZE AND ACOUSTIC COMMUNICATION OF WHISKERED AUKLET (*AETHIA PYGMAEA*).

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The whiskered auklet breeds on a few remote islands of Bering and Okhotsk Seas and displays complex social behavior, possesses bright plumage ornamentation and developed acoustic communication. The difference in body size have been reported for Kurilian and Aleutian birds, however until recently colonies from Sea of Okhotsk remained unexplored as well as population variations in vocal characteristics of the species. We collected data at Buldir I., Aleutians (June-July 1993), at Saint-Jonah (Iona) I., Sea of Okhotsk (July 2009) and at Medny I., the Commander Islands (June-July 2012). We measured body weight and wing, tarsus, bill, crest lengths. Ten temporal-frequency parameters of Mew and Beedoo calls were analyzed, as well. We found that Saint-Jonah birds were significantly larger than Buldirian ones (T-test, $p < 0.001$ for all comparisons). We didn't find any overlap in weight and tarsus length between populations (e.g. weight(g): Saint-Jonah: 146.5 ± 8.4 , $n=15$; Buldir: 110.1 ± 6.1 , $n=64$). Saint-Jonah auklets also emitted lower in fundamental frequency calls than Buldirian ones (ANOVA, $p < 0.001$ for all comparisons). The Medny I. birds occupy intermediate position (e.g. wing length (mm): Saint-Jonah: 113.2 ± 3.6 , $n=15$, Medny: 111.7 ± 3.1 , $n=29$, Buldir: 106.8 ± 3.1 , $n=114$; peak fundamental frequency of Mew call (Hz): Saint-Jonah: 973 ± 84 , $n=100$, Medny: 1078 ± 92 , $n=100$, Buldir: 1109 ± 114 , $n=100$). Also studied populations reveal different rhythms of activity at the colony surface: while Medny and Buldir I. birds are nocturnal, the Saint-Jonah auklets are completely diurnal. Our data proved the strong inter-population variability in this species. However additional studies, especially genetic, are necessary for better understanding the species' population structure and ecology.

CLIMATE CHANGE IMPACTS ON THE BLACK OYSTERCATCHER AND POTENTIAL SUSTAINABLE MANAGEMENT SOLUTIONS

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The Black Oystercatcher (*Haematopus bachmani*) is a shorebird species of high conservation concern. Climate change impacts on marine shorelines are expected to further tax this species by reducing intertidal habitat and reducing larval recruitment of Black Oystercatcher prey species. Tectonic plate movement complicates predictions concerning sea level rise and habitat loss throughout the range of the Black Oystercatcher. Threats to the Black Oystercatcher are articulated and sustainable management options are explored.