ECBB Vienna 2016

8th European Conference of Behavioural Biology
Vienna July 12-15, 2016

Book of Abstracts

Talks

A36. Effect of social environment on time budget of tufted puffin *Lunda cirrhata* (Alcidae, Charadriiformes) on the colony surface

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Colonial seabirds are good objects for studying acoustic and visual communication, and analyses of species-specific time budgets lay a basis for such investigations. Here we studied time budget of tufted puffin on the colony surface, the effect of social environment on it and compared it with three other closely related auk species. We collected data in June-August 2013-2015 on Talan Is. (Sea of Okhotsk, Russia). We recorded behavior of focal birds and analyzed 41 videos (1 video of 210-1100 s per bird) in Observer XT software. We composed ethogram containing 3 types of self-maintenance (vertical and horizontal postures, self preening) and 11 types of social behaviors (moving, agonistic behavior, manipulation with nesting material and displays: duet, duet rejection, demonstrative gait, bow display, landing display, weak and expressive threat displays, demonstrative scrutinizing). We found that puffins spent 89.6% of their time on self-maintenance and 10.4% - on social behaviors. As other auks, they performed nearly all behaviors with the same frequency before and after chicks hatching during breeding season (Kruskal-Wallis ANOVA, $p>0.05$). Unlike other auks, the presence of conspecifics in immediate proximity (no more than 2 corpuses) had almost no effect on the occurrences of puffins behaviors (Mann-Whitney U-test, $p>0.05$). Amount of conspecifics at farther distance (no more than 9 corpuses) also did not influence on the occurrences of behaviors (K-W ANOVA, $p>0.05$) with few exceptions. So as in other auks, the time budget of tufted puffin mainly consists of self-maintenance behavior and almost doesn't depend on breeding season stage, but, unlike the species, it doesn't depend on social environment too. Supported by the Russian Science Foundation (grant 14-14-00237).