

Abstract:

The climate in the polar regions is so extreme that it has led to a big number of special adaptations in life and reproduction of local animals. However, the disadvantages are compensated by several important aspects like much lesser activity of predators, long sunny polar day and an abundance of nutrients during spring and summer. It is no wonder that many species of birds have adapted their life cycle and migrate annually thousands of kilometres to the polar regions in order to increase their chance of successfully leading out their offspring. Birds in these areas nest during the polar summer. Only one species of nesting begins already during the polar winter, it is an Emperor Penguin (*Aptenodytes forsteri*) in Antarctica. The broods of birds nesting in polar regions are bigger in quantity in average and they also incubated longer than their counterparts in temperate and tropical. The main difference is the incubation rhythm adjusting mainly the extension of sessions associated with a reduction of recesses. The only exception are songbirds who leave their nests frequently but only for a short period of time. The information about the incubation behaviour of the most of the bird species of the polar regions are still very limited and incomplete. Therefore, this bachelor thesis contains so far partially processed data regarding the incubation behavior of Arctic Tern (*Sterna paradisaea*) in the Arctic.