

Effects of oil extraction and recreational load on forest bird communities during the post-nesting period

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Abstract

Effects of recreational load and oil extraction on forest bird communities during the post-nesting period are considered in the article. Ornithocomplexes from recreation areas, places of oil extraction and ecosystems with lower anthropogenic press (Nizhnyaya Kama National Park, Republic of Tatarstan, Russia) were compared based on several indices. The lowest values of Shannon's index, Berger-Parker's index, species diversity, total density of population and maximum species density were observed in the forest bird communities of undisturbed areas. The highest values of the above-said indices were found in the forest areas, suffering from active recreation. The places of oil extraction occupy an intermediate position when their values for each of the indices are considered. The evenness index was highest for bird communities, inhabiting undisturbed areas. It was demonstrated that the effect of recreational load and oil extraction on forest ecosystems can be retraced from the basic indices calculated for bird communities during the post-nesting period. © IDOSI Publications, 2013.

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Keywords

Anthropogenic transformation, Bird communities, Oil extraction, Recreation