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Abstract
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THE EFFECT OF FRAGMENTED RAINFOREST VEGETATION ON THE ADAPTATION STRATEGY OF FRANCOLIN BIRDS (*FRANCOLIN BICALCARATUS*) IN BANGEM, SOUTHWEST REGION, CAMEROON

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ABSTRACT

Habitat fragmentation is a growing threat to many species globally, particularly those living in tropical rainforests. Francolins are an integral part of the tropical rainforest ecosystem in Cameroon, playing important roles as seed dispersers, insect and small prey consumers, and prey for larger predators Their presence helps maintain the balance and diversity of the forest food web, hence their conservation in Cameroon is crucial for maintaining the ecological balance, supporting local livelihoods, preserving cultural heritage, and contributing to the sustainable management of the country's valuable rainforest resources. However, the study investigates the impact of fragmented rainforest vegetation on the survival strategy of the Francolin bird (*Francolin bicalcaratus)* in Bangem region. The study was conducted over a 5-month period in two forest sites with varying levels of fragmentation, a contiguous primary forest, and a highly fragmented edge habitat. Data was collected through direct observations during the first 15 days of each month. The results indicate that Francolin birds exhibit significant behavioral adaptations in response to forest fragmentation. Nonetheless, fragmented rainforest vegetation significantly associated with aggregation of francolin birds r=0.650 P=0.000, climatic conditions r=0.514 P=0.000, and food-type X^2=59.312 df=2 P=0.000 respectively. The conversion of rainforest habitats into a mosaic of forest fragments and cropland has had a significant impact on the aggregation and distribution patterns of Francolin birds (*Francolin bicalcaratus*) in Cameroon's Southwest Region. Besides, there was a significant relation between Fragmented rainforest vegetation and the hourly day-period X^2=66.086 df=2 P=0.000. Francolins are known to have distinct activity patterns throughout the day, with specific times of the day when they are more active in foraging, breeding, and other behaviors. More so, Anthropogenic activity and seasonal changes associated significantly X^2=68.159 df=1 P=0.000. Furthermore, the social behaviour of francolins and their vocalization frequency revealed a significant link X^2=32.417 df=6 P=0.000. The study highlights the remarkable plasticity of Francolin birds in adapting to habitat changes. However, the long-term viability of these survival strategies under ongoing deforestation and fragmentation remains uncertain. These findings underscore the importance of maintaining large, contiguous forest tracts to support the full range of Francolin behavioral and ecological adaptations.

Keywords: Francolin birds, Habitat fragmentation, Primary Forest, Survival strategy, Vegetation

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IMPACT OF HOSTILITIES ON THE ENVIRONMENT OF THE NORTHERN REGION OF UKRAINE

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ABSTRACT

The Chernihiv region is located in the north of Ukraine, on the border with Russia and Belarus. Therefore, it has had a significant negative impact and horrific consequences from Russia's military aggression. During the period of the Russian military siege of Chernihiv (37 days), the aggressor state was causing irreparable and catastrophic damage. At the same time, indirect losses may manifest in the coming years and decades and these consequences are unpredictable. And now the enemy fired and destroys the border of the region every day. Undoubtedly, the war had a very negative impact on each component of the environment: phytocenosis, microbiocenosis, zoocenosis, hydrobsein, air, soil. The consequences will be long -term and will not only be local but also global.

Key words: impact of hostilities, environment, northern region of Ukraine.

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