ABSTRACT

Assessing the impact of 5G technology radio frequency on animal and bird behaviour, health and habitat

The rapid deployment of 5G technology, with its high-frequency electromagnetic radiation, has raised concerns about its potential effects on wildlife. This research aims to investigate the physiological, behavioural, and ecological impacts of 5G radiation on a diverse range of animal species, including mammals, birds, insects, and aquatic life. Key areas of investigation include alterations in animal behaviour, such as feeding patterns, navigation, and social interactions, as well as potential health risks like stress responses, reproductive health issues, and changes in immune function.

Additionally, the research explores how 5G infrastructure, such as towers and antennas, could contribute to habitat fragmentation, disrupting natural ecosystems and food chains. By conducting both field and laboratory studies, this project aims to assess the broader ecological consequences of 5G radiation, focusing on species that rely on electromagnetic cues for migration, communication, and navigation.

The findings are expected to provide critical insights into the environmental impact of 5G technology and inform policy recommendations for mitigating potential risks to wildlife and ecosystems. This research is particularly significant in the context of increasing urbanization and the expansion of 5G networks, aiming to ensure that technological advancements are balanced with environmental conservation.

Guided By

Mr. S. B. Kartikeyan

Team Members Name

D. Rubitha [24MCR083]

K. Siva [24MCR101]

B. Thirisurya [24MCR117]