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Rapid Communication

Urban Zoology: Exploring the animal world in cities.

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Introduction

Urban zoology is a branch of zoology that focuses on the study of animals that live in urban environments, such as cities and towns. With the rapid growth of urbanization across the globe, animals have increasingly adapted to life in human-dominated landscapes [1]. Urban zoology examines how these animals interact with their surroundings, the challenges they face, and the ways in which human activity affects their behaviour, survival, and populations. The study of urban zoology is crucial in understanding the resilience of species and the impact of urbanization on biodiversity [2].

Historically, cities were considered inhospitable to many species, but over time, animals have demonstrated remarkable adaptability to urban settings. From the widespread presence of pigeons and rats to the more surprising appearances of coyotes and foxes in urban parks, wildlife has found ways to thrive amidst human infrastructure. Urban zoologists study these trends, focusing on animal behaviour, ecology, and how cities can coexist with the natural world in more sustainable ways [3].

Many animals have developed unique adaptations that allow them to survive in cities. These adaptations may involve changes in diet, behaviour, or reproductive strategies to cope with urban challenges like noise, pollution, and limited space [4]. For instance, birds like pigeons and crows have become highly successful in cities, often feeding on human food scraps and using buildings for nesting. Other species, such as raccoons and coyotes, have learned to navigate urban areas to find food and shelter. Urban zoologists explore how these animals adjust their behaviour to thrive in environments that are vastly different from their natural habitats [5].

As cities grow and expand, the interaction between humans and animals becomes increasingly important. Urban zoology examines the various ways in which animals and people coexist in cities, whether it's through positive interactions, such as birdwatching, or negative ones, like the spread of zoonotic diseases or conflicts between humans and wildlife. For example, encounters with wildlife in urban settings can sometimes lead to accidents, as animals may cause damage to property or pose a threat to public safety. Conversely, some species, like pollinators and small mammals, contribute to the health of urban ecosystems [6].

Urban zoology is concerned with maintaining biodiversity in cities. While cities tend to support fewer species than natural environments like forests or wetlands, urban areas can still host a wide variety of animals [7]. Parks, green roofs, urban forests, and riverside corridors provide essential habitats for wildlife. The study of urban biodiversity looks at how cities can be designed to support and enhance the presence of different species. It also involves monitoring and conserving species that are becoming increasingly rare due to habitat loss and urban sprawl [8].

Invasive species are one of the major challenges in urban zoology. These are species that are introduced to new environments, often through human activities, and disrupt the local ecosystems. In cities, invasive species like rats, squirrels, and certain plants can outcompete native species for resources, leading to a decline in local biodiversity. Urban zoologists study the impact of invasive species on native wildlife and seek methods to manage and control their spread in urban areas [9].

The goal of urban zoology is not only to understand how animals live in cities but also to find ways to protect and conserve urban wildlife. Urban areas can be designed with wildlife in mind by incorporating green spaces, wildlife corridors, and sustainable practices. For example, planting native vegetation and creating habitats such as birdhouses or bat boxes can provide safe spaces for wildlife. Additionally, the study of animal behavior in cities helps inform policies and practices aimed at reducing human-wildlife conflict and promoting coexistence [10].

Conclusion

Urban zoology plays an important role in understanding the dynamic relationship between animals and the urban environment. As cities continue to expand, it is crucial to recognize the value of urban wildlife and to develop sustainable ways to live alongside animals in increasingly crowded spaces. By studying the adaptations of animals to urban environments, examining human-wildlife interactions, and fostering biodiversity, urban zoologists can contribute to creating cities that are not only home to humans but also provide a sanctuary for wildlife.

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