

Impacts of covid-19 pandemic on wildlife-mini review

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SUMMARY

Coronaviruses are zoonotic viruses, RNA viruses and belong to family Coronaviridae. This viruses cause respiratory infections and have a crown-like look. A new coronavirus known as SARS-CoV-2 documented in end of 2019, cases were reported in China. SARS-CoV-2 causes the ailment recognized as “coronavirus disease 2019” abbreviated as COVID-19. China is one of the world's major users of wild fauna for traditional Chinese medicine as well as food. Due to COVID-19 pandemic, worldwide demands for wildlife permanently close during pandemic. It is also noted that road accidents are decreased and breeding success is enhanced in wild animals during COVID-19 pandemic.

Keywords: Coronaviridae, COVID-19, Wildlife, Outbreak, Traditional Chinese medicine, zoonotic viruses

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INTRODUCTION

Coronaviruses are zoonotic viruses, RNA viruses in the family Coronaviridae, cause respiratory infections and they have a crown-like look and SARS-CoV-2, a new coronavirus documented in end of 2019 after cases were reported in China, which causes the ailment recognized as “coronavirus disease 2019” (abbreviated as COVID-19) (Altaf, 2020; Sampangi-Ramaiah *et al.*, 2020; Umair *et al.*, 2021).

Like this widespread and rapid modification in the human lives in the earth have to have an effect on the wildlife (Bates *et al.*, 2020). Environmental noise reduction was reported (Derryberry *et al.*, 2020; Zambrano-Monserrate *et al.*, 2020; Basu *et al.*, 2021). Amusingly, the wildlife response to modification in the economy and human society functioning was also fast. This occurrence documented was that the human disturbance reduction allowable wildlife to to increase daily activities and built-up habitats (Manenti *et al.*, 2020). Since the start of the pandemic, proof of the occurrence of wild fauna diversity in landscapes where these species have not been observed for decades of years has been discussed by people (Bar, 2020; Derryberry *et al.*, 2020). Lot of different changes in behavior of animal have also been noted, such

as in vocalizations of birds during the COVID-19 pandemics (Derryberry *et al.*, 2020), changes in feeding sites, increased aggression, as well as the new competitive systems formation in species of synanthropic rapidly deprived of human food (Gilby *et al.*, 2021). COVID-19 pandemic, human have been provided the chance to get unanticipated insight into how their occurrence impacts behavior of animal and how flexibly and quickly fauna can respond to unique changes, like “lockdown” and the “global human confinement experiment” (Abd Rabou, 2020; Bates *et al.*, 2020; Montgomery *et al.*, 2020).

COVID-19 IMPACTS ON ILLEGAL TRADE IN WILDLIFE

Asian countries especially China is main users of wild fauna for traditional Chinese medicine and food (Yi-Ming *et al.*, 2000). A high amount of illegal use has been reported in the country's various cities. A little research found the sale of animal species spread across birds, mammals and reptiles. “Turtles” were the high trafficked wild creatures in China's wildlife trade. The animals for sale originated not just in China, but also in Southeast Asia. The COVID-19 epidemic, which most likely began at the Wuhan in China, which may cause “extinction” and “transmit illness”. Farmers of Chinese utilized to accumulate and breed wild fauna for domestic consumption. Overexploitation of fauna via hunting had resulted in a rise in contagious animal illnesses that might be transmitted to people. Furthermore, when wildlife's natural habitats shrink due to anthropogenic reasons, fauna come closer to humans, which increases disease outbreaks in biodiversity and humans at danger of epidemics. As a result, many worldwide demands have been made for China and other nations to permanently close down wild animal marketplaces due to the strong relationship between those markets and the spread of zoonotic illnesses (Yiming and Dianmo, 1998; Altaf, 2020).

COVID-19 IMPACTS ON BREEDING SUCCESS OF WILDLIFE

The anthropogenic impact is a basic characteristic of environments of urban impacting native wildlife in many ways. Observing the impact of disturbance of human would preferably require new approach, while, in urban, this is demanding at related temporal and spatial scales. Therefore, to more know the anthropogenic impacts on ecology. It is noted alters in success of reproduction of *Parus major* and known as great tits at two different urban habitats impacted differently by the “anthropause”. Study showed that anthropogenic impact can have unfavorable fitness consequences in city populations (Seress *et al.*, 2021).

WILDLIFE ROAD KILLS REDUCTION

Worldwide, wildlife is impacted by unparalleled changes connected to pandemic of COVID-19. The lockdown impacts on mortality in “hedgehogs” in city area. Evaluating the before pandemic and during pandemic noted that “hedgehog” road mortality levels during the period of lockdown were more than 50 percent lower. It is need to start more study on the possible genetic and demographic impacts of this matchless experience (Lopucki *et al.*, 2021). Observation proposes that even short time of reduction of traffic or closures of road could be utilized as part of a strategy

for the endangered wildlife populations conservation anywhere road-kill is a risk issue (Driessen, 2021).

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