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Research Article

A GLOBAL AND ENVIRONMENTAL CONCERN: THE HOUSE SPARROWS EXTINCTION

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ABSTRACT

With the increase in population in humans some species of birds reaches to extinction and comes under the red list by the IUCN. Housesparrows (*Passer domesticus*) known as “Home birds” a chunky bird with stout beaks and large heads also carried out black and brown streaks reaches from 6.7 million to species extinction. By the use of several methods as active and passive by human this species comes under red list today.

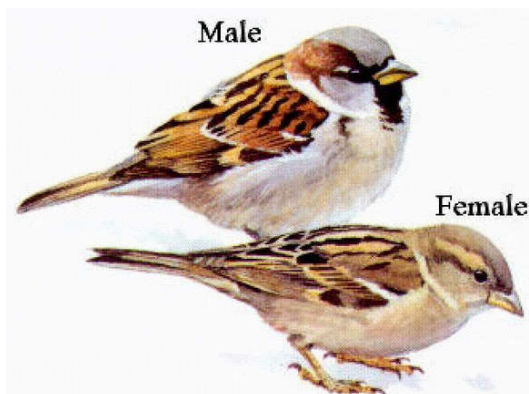
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House sparrows, *Passer domesticus*,
Extinction, Red list

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INTRODUCTION

Population and species are correlated concept as per the ecologist. If population increases then that advances the concept of species richness up to the organism level. Species live, survive and retain its presence worldwide by living as entities whether created naturally or artificially. In case of birds they make flocks to survive and produces their off springs. But by the advancement of technology, habit and habitat loss occurs as a result species number decreases exponentially. By the habitat degradation the concept of home vanishes. House sparrows (*Passer domesticus*), a chunky bird of large heads and stout beaks also knows as Home birds.



In both sexes, black and brown streaked body texture is normally characterized. House sparrows (*Passer domesticus*) belongs to the family Passeridae having length of 16 cm (6.3 inch) and mass of 24 - 40 g comes under kingdom Animalia retrieved various parts of the world.

Biologically, males are bright coloured birds with black bib, white cheeks grey crown possessing chestnut brown sides and bib extends from beak and eyes to the throat. Correspondingly, females are devoid of black bib but with buff grey underneath and have a pale super cilium (stripe above eyes). Mostly the genus lives in nest on buildings.¹

They live in the nest of 32mm of entrance hole with box of about 30cm high and 15cm deep also carries cavities in it which provides a help in development of colonization. House sparrows are more prone to bird feeders, tables in poor conditions and irregular baths. All through in the winter season, if long grass kept and weedy areas in good condition provides hibernation places for invertebrates. As per the survey study, 6.7 million pairs of population were noted. More than 30,000 birdwatchers contribute their time and diet of seeds, shoots, scraps, insects for conserving and breeding to new-borns with eggs of clutch size of 4-5, incubation period of 13 -15 days and young with nest of 15 -17 days. But they live with a lifespan of 3 years longevity typically and with maximum of 12 years of lifespan recorded.¹

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House sparrows (*Passer domesticus*) also named as English sparrows and *Moineau domestique* a world's old sparrow native to Europe then flourishes within large areas of the world. These species are making their nests by using leaves, grasses, fabric or scraps of paper out of 12 species of current record. In the life history, adult breed produces 4 broods approx. in a year as per season (March-August in North America). Mostly, they are monogamous but finding new mates for breeding quickly and then within a month a single brood raises after incubation period of 14- 16 days.



House sparrows are distributed widely with abundantly as songbirds in North America. In the beginning of the 1850's, they were introduced from England to reduce the insect pests by the new immigrants and resulted to increase in population at an explosive rate later on they realized their mistake, for they were threat to crops and fruit trees. After several years they took over nests and species reached under an alarming rate.²

Last two or three decades, species *Passer domesticus* population declines to low-watermark mainly in urban and suburban areas by 60% and in rural areas by 47%. Mainly in the urban areas the population rate diminishes due to horse-drawn transport and generally cleaner streets in the early first half of the 20th century. In the rural areas, unquantified changes occur in the fields and more secure storage of grains in case of food resources of the harvested products alters in the farming practices worldwide and reaches to the nadir.³ As per the IUCN or red list these species reaches to extinction due to the reasons such as:

Sparrows control methods

For the control of sparrows, Active Control (e.g., removing nests, eggs and trapping adults) and passive control (taking preventative measures to discourage sparrows). In the passive control, the first method is box location (a crucial factor in controlling sparrows) with some complications as per the height (low -preyed on by snakes ,high -risk of raccoons and cats were predators) so boxes must be placed at a feasible locations .Secondly , by plugging the entrance hole of the box to capture and that prevents the male to encourage. Thirdly, by eliminating feeding areas and nesting sites. fourthly, by using gilbertson pvc boxes.⁴

Invasive species

One of the leading cause of elimination of species globally from forests and topically is invasive species. Invasive species, non-native organism to ecosystem but harmful for environment, economy or even health of the human beings. House sparrows are the one of the species of the invasive organism. Gurevitch and Padilla concluded, invasive species in

birds (65 out of the 129 species) declines to extinction and noted down under IUCN 's List.⁵

Use of pesticides

Mostly in the agricultural lands the use of pesticides intensively to increase the productivity but alternatively affects the number of invertebrates and weed feed sources. The chemicals in the pesticides diminishes the fertility of the soil and ultimately situation such as soil infertility occurs. Similarly, in gardens the gardeners use pesticides to increase production and growth of the flora by the use of herbicides that ruins the life cycle of ecosystem by reduction in the availability of invertebrates as well as sources of weed feed.

Inadequate food supply

As per the Hamburg study, in early spring the inadequate number of aphides (invertebrates) for the young ones usually declines the breeding of the sparrows (Mitschke *et al.*, 2000) and Summers-Smith (1999).

Disease within the species

One of the main attribute but unknown is disease that results to the disease in house sparrows on large scale. An infection due to Salmonella and virus and its form also affects the species of bird's tables.

Competition with other species

In the IUCN list, the bird table exists but competition of species for survival, for food and among species as (intra and interspecies) also declines the number of species which ultimately affects the concept of species richness. The competition of house sparrows with other birds affects the species probably on global aspect.⁶

House sparrows, non-migratory species indigenous to all parts of the India and closely related to the humans and their habitation present vicinal which is now extensively absent from forests and woodlands as well from grasslands or deserts having economic importance as positive(eating insects from kitchens, gardens and use garbage material for nest) and negative(noisy and produces large quantity of faeces as well as agricultural pests) and maintaining ecosystem role(affects plant communities by consuming seeds and acts as prey).But normally they use various sets of postures and behaviour for communication with other species that also becomes a reason to attract new mates, deter intruders and warn others but now reached to the extinction as red listed by IUCN from last 25 years.⁷

CONCLUSION

Passer domesticus (House sparrows) nonmigratory species which named as songbird in the north America and then widely distributed all over the parts of the world and by the active and passive methods the population declines that reaches to the extinction as shown by the reports of the IUCN of red list. IN terms of the environmental and global concern, species richness and extinction is the fundamental factor to maintain the lifecycle of the ecosystem and its processes.

References

1. (2017). Retrieved 6 May 2017, from, <https://www.bto.org/sites/default/files/u23/downloads/House%20Sparrows.pdf>

2. Calvin L, Lowther, Peter E., Cink, (2006). House Sparrow (*Passer domesticus*). in Poole A. The Birds of North America Online. <http://bna.birds.cornell.edu/bna/species/012>. accessed 3/7/2012
3. Crick, H. Q, Robinson, R. A. & Siriwardena, G. M., (2005). Size and trends of the House Sparrow *Passer domesticus* population in Great Britain. *Ibis*, 147(3), 552-562.
4. North American Bluebird Society. (2017). [Nabluebirdsociety.org](http://nabluebirdsociety.org). Retrieved 6 May 2017, from <http://www.nabluebirdsociety.org>
5. Garciaberthou, E & Clavero, M., (2005). Invasive species are a leading cause of animal extinctions. *Trends in Ecology & Evolution*, 20(3), 110-110.
6. Grimble, R., & Laidlaw, M. (2002). Biodiversity management and local livelihoods: Rio plus 10. Overseas Development Institute.
7. D. K. Joshi, (2009), House sparrow (*Passer domesticus*): the endangered bird. *Orissa Review*, 2009, 53-55.

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