THE NATURAL RESOURCES AND MANAGEMENT (SAVE SPARROW) IN AROUND THE GINGEE FOREST

S.Rushil raaj[1], K.Yokesh sharma[2],P.Sathiya murthy [3]A.vijaya kumar [4], E.Vinoth [5]
G.periyannan[6*]

[1,2] project student, Saradha metric higher secondary school,gingee,Tamilnadu,India
[3,] Pg assistant, Saradha metric higher secondary school,gingee,Tamilnadu,India
Research schlolar ,Department of physics,government artscollege ,tiruvannamalai
[5]Assistant professor, Department of physics,Shanmuga industries arts & science college,tiruvannamalai, Tamilnadu,India

ABSTRACT

Effective conservation of birds determines the precise conservation of biodiversity in the environment. In India, the bird population of house sparrow Passer domesticus has significantly declined due to urbanization and pollutions caused by humans. Ecologists are sure that this bird has a common appearance with people, therefore its identification and recognition as a species of birds depends on the human environment. Urbanization is characterized by such as the development of infrastructure, the use of vehicles, a renovated modern building, which leads to a loss of habitat and fragmentation of the house sparrow population. Hence, this project was undertaken to find a suitable method for preserving a house sparrow population in forest areas by installing 30 artificial nests with the location of water and grain. These artificial nest studies provide the introduction of new technologies to preserve the environment in modern rural and urban areas .

Keyword : - *House Sparrow Habitation ,decline of house sparrow, discussion of artificial nest etc….*

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1. INTRODUCTION

Portable phones, also called cell phones or pens, are now an integral part of modern life. The widespread use of universal phones has been made possible thanks to the creation of an increasing number of base stations that accept wires on poles and buildings. GSM base stations emit electromagnetic fields at high frequencies in the frequency range of 900 and 1800 MHz (downlink repeatability groups), balanced in mu frequencies[1]. Later, for a long time, expanded open awareness and a logical question dealt with the extent to which unsaturated exposure to low-intensity electromagnetic fields can affect the well-being, generation, well-being and behavior of people and other life forms. There are dynamic and, however, unresolved disagreements with almost current security assessments. Several analysts and national committees have called for stricter safety guidelines based on test information with detailed organic exposures to (permanent) non-warm exposures. There are considered options for the appearance of organic frequency shocks and reflections illustrating that a high repetition flag balanced at specific moo frequencies, or a broken flag, has a more harmful effect than an unmodulated, relentless carrier. These so-called "window effects" incredibly complicate any attempts to establish a connection between electromagnetic radiation and well-being.[2-3]

House Sparrows Poultry is the most common and common bird species in nature. A widespread and once inexhaustible sparrow, which is usually recognizable by appearance, in later times has become an unusual bird in numerous territories. The number of urban sparrows has decreased by almost 60% in urban and rural areas, and the composition and quality of the territory in urban and suburban areas are likely to have changed over this period. In

large cities, the number of house sparrows has declined significantly in subsequent decades. A significant decrease in the number of sparrows in London (60%), Glasgow (99%) and Hamburg (77%) should lead to the consideration of the British Ruddy list. The main reasons for the decrease in this species in urban and suburban areas were failure in a suitable environment for garbage collection and failure in reasonable places of settlement.[4]

1.1 House Sparrow Habitation

Typically, sparrows are small, chubby, brown-gray birds with short tails and short, powerful beaks. Differences between species of sparrows may be minor. House Sparrow - a small singing bird, males, and females can be distinguished clearly; Male birds have black throats, white cheeks, and a black bib, while female birds are brown in color with a strip on the eye. The average size is 14-16 cm, and the weight is almost 26-32 grams. This is a small bird and the beak is thick, legs are short with a pale pink color[5-7]. The peculiar behavior of the House Sparrow is dust bathing. Sparrows will first scratch a small hole in the ground with their feet, and then they will lie down on it and sweep dirt or sand over their bodies with wing-flaps. Water bathing is like dusty bathing when a sparrow stands in shallow water, flapping wings from the back of its wings, and also tilts its head under the water.

House Sparrows are similar to areas that have been changed by humans, including farms, residential and urban areas. They are attracted to buildings for overnight and shelter. They built their nest on thatched roofs, in sun visors, nooks or crannies, in attics, in kitchens, in exhaust openings, hanging baskets, unused posts with end caps, garden trees, shrubs, etc. The main diet of Sparrow consists of seeds of grain, especially cereals from waste and animal feed. The alternative to the seed diet is very wide and varies from arthropods such as small insects, mosquito larvae, butterflies and the human trash can. During spring, they prefer to eat yellow flowers, fruits, etc

1.2 Importance of a house sparrow

Every organism on this planet plays a role and participates. As civilized animals with a sixth sense, we never thought of others coexisting with family members. Here we consider the importance of the most affected common ecosystem species.

Ecological balance maintains: Sparrow is one of the vital members of various urban and natural food chains and food webs. It feeds on grains such as rice, wheat, kumbu, etc., as well as the larvae of mosquitoes, dragonflies, etc. There are many examples. In 1850, house sparrows were introduced to fight the green inchworms that destroyed thousands of trees in the New York City Park at the Brookly Institute, USA. The problem was under control, and now it is an ordinary US bird. The stage of chickens is the phase of eating insects when sparrows feed on small insects in the garden. It is well suited for research in general biology, such as the evolutionary mechanism, temperature exchange, and pest control. He also feeds on a mosquito larva, which breeds in stagnant water in an accessible area of the house. Sparrows go in search of larvae and feed on them. This mechanism is a natural pest control process in which a person also takes advantage without any cost. Sparrows bring up prosperity. We like to watch this small and cute bird. Our children always want to watch this bird and always sing songs related to this bird in order to entertain themselves.

Pollination of plants: Pollination is the process of transferring pollen to a female flower as part of sexual reproduction. Sparrows visit many flowers a day for food. During the visit, they carry pollen and dump it into a female flower, which leads to the fertilization of the flower. Therefore, a sparrow is very important for pollination.

2. House Sparrow Nests:

The nests had two separate layers: a structural layer and an inner lining.Structural layer - the base layer of the nest, consisting mainly of plant matter. Lining - a thin layer has direct contact with eggs and chicks.This layer is made from soft and thin materials such as paper, cotton, and jute. In general, sparrows used whole/parts of grass species, of which three were identified and one unidentified, one sedge, three grass, one shrub, and two tree species, excluding unidentified substance. In some situations, artificial nests can be a useful resource, allowing you to build nests in places where natural materials are limited to:

Table 1: Constituents of house sparrow nest layers.

No.	Species/materials	Parts used	Nest layer
Plant matter			
1	*Aerva lanatah*	Flowers/stem	Structural
2	*Azadirachta indicat*	Leaf/flowers/fine stem	Structural/lining
3	*Boerhavia* sp.h	Leaves/whole plant	Structural
4	*Cynodon dactylong*	Whole plant	Structural
5	*Cyperus* sp.se	Leaves/whole plant	Structural
6	*Dactyloctenium aegyptiumg*	Stem/whole plant	Structural
7	*Eleusine indicag*	Leaves/whole plant	Structural
8	Grass sp.	Leaves	Structural/lining
9	*Moringa oleiferat*	Leaves/fine stem	Structural
10	*Parthenium hysterophorush*	Stem/flowers/inflorescence	Structural
11	*Musa paradisiacah*	Thread/leaf	Structural
Anthropogenic matter			
1	Paper	Small piece	Lining
2	Plastic	Small paper piece/fine rope	Structural/lining
3	Cotton thread	Small piece	Lining
4	Coir	Fine piece	Lining
5	Cotton	Rope/fine	Lining
6	Jute	Fine	Lining
Animal matter			
1	Chicken feather	Fine part	Lining
2	Hair	Hair	Lining
Unidentified		Parts of leaf, flower, stem etc.	Lining

Table 2: Constituents of house sparrow nest layers along an urban to rural grade.

Nest material	**Rural (%)**	**Suburban (%)**	**Urban (%)**
Plant matter	89.80	82.94	77.10
Animal matter	–	0.78	1.20
Anthropogenic matter	10.20	11.96	21.69
Unidentified	–	4.31	–

Fig -: The types of sparrow

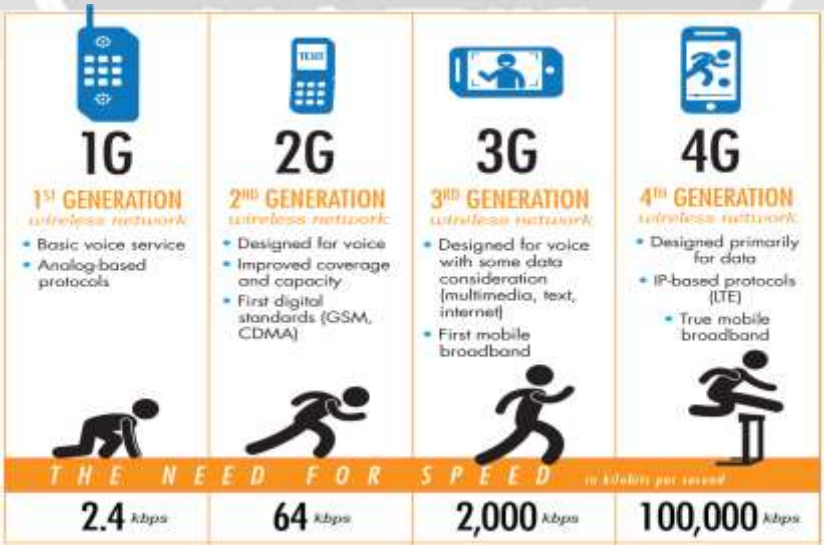

Fig 2:The table for the generation

2.1 Sparrow Conservation

It is the time to take fruitful efforts to conserve the tiny social, human associated bird. It is our responsibility to save this small, lovable, beautiful and harmless bird for environment and for ourselves. Nothing other than the efforts and heart are require for this may create great impacts in the life system of house sparrows..

2.2 Decline of house sparrow

House Sparrow is recorded in the Red Book of the International Union for Conservation of Nature (IUCN). The reason for the decline in the number of sparrows is a lot of differences: from mythology to the mentality of a simple person. List the factors listed below:

Loss of habitat: this is the main factor that sparrows have disappeared from streets and houses. An assessment of architecture blurred the thatched roof and the tiled house from society. Thanks to modern technology, the old spacious buildings have been changed to the forms in which sparrows fight to find a habitat. This is the most important reason for their population.

Lack of food: Passer herds fly 1.5-2 miles for food, such as grain, insects, etc. In the modern way of life, people tend to buy things in a packed pocket that is previously cleaned or dried. Currently, the probability of cleaning and drying grain in front of the house, balconies and upper floors is much less. This led to a shortage of food for these tiny scavenger birds. Many local roadside shops were closed due to the heyday of modern department stores, in which we collect everything in packed pockets somewhere a few kilometers from us, and also offer little chance of finding side grains on the roads. In modern agriculture, on the other hand, insects are the second-largest feed for young chickens. The use of broad-spectrum insecticides has reduced the availability of insect feed. It also affects the availability of poison less fruit. A recent study showed that sparrows are seen near organic fields and sit on the ground for food.

A modern way of life: a changing way of life has deprived sparrows of their nesting. The fast-paced lifestyle of urban and semi-urban areas is also reflected in people's attitudes to birds and biodiversity. Previously, people shared symbiotic relationships with animals and birds, and also accepted coexistence. They will not mind that sparrows build nests in their homes and places where access is restricted to the common man. Modern buildings in the form of matchboxes with glass cladding do not have cavities that are important for sparrows when creating nests. Building nests in windows, awnings, AC ducts that seem ugly in relation to million-dollar buildings. According to one study, the use of unleaded gasoline can also have a critical effect on sparrow reduction. During the combustion of unleaded gasoline, methyl nitrate is formed, which is very toxic to small insects, which make up the bulk of the sparrow diet.

Losing the crown of trees: Industrial development era, the government tent to increase the width of the roadsides on the urban and rural areas and trees are cut down, not understanding the ecological significance of trees or simply ignoring the real fact.

Cell Phone Towers: Environmental experts say the sparrow is not able to withstand the effects of microwaves from cell towers. Because reproductive abilities and the immune system have been severely affected, leading to a situation where the ubiquitous sparrow is currently rare in urban areas. But a recent study of the encyclopedia on the state of the environment claims that there is no convincing evidence of the negative connection between endangered sparrows and electromagnetic waves from cell towers. It is believed that magnetic waves act on the eggs of sparrows, but this is not scientifically proven, since the waves of the cell phone tower are non-ionizing waves that are not connected to the cell, DNA, etc.

3. DISCUSSION OF ARTIFICIAL NEST

Hypothesis 1:

Types of house sparrows that are subject to the influence of sound, since the ability to hear frequencies is 1000-4000 Hz, and human audible frequencies are 20-20 000 Hz. In urban areas, sounds made by vehicles and all

industrial facilities are heard, sparrows cannot live there, birds walk at night, but in cities, the movement of birds is inefficiently lit by cities. Since they cannot get it, be it day or night. To confirm this, the lights should be dimmed. Especially in urban and modern rural areas, we must reduce the spread of sound frequencies everywhere. The government must commit to preserving the trees and developing the forestry.[8-10]

Hypothesis 2:

Gingee fort –siruvadi ,muttu forest

The radiation is exposed to sparrows, so we choose a low radiation frequency of 30.589 in the forest, which he could not injure. Close by, we built an artificial nest that has less than 30% of the radiation frequency and arranged the availability of food and water next to the birdhouse. The place is surrounded by bushes and shrubs which supportive to avoid from predators.

Construction of Artificial nest placed in siruvadi forest areas

4. CONCLUSIONS

This research seeks to evaluate the impact of electromagnetic radiation on house sparrows along with proposition of a solution to the same.The response of artificial nest boxes erected at different places of siruvadi muttu forest gingee fort villupuram district.The aim is also we are pleadge next world sparrow day on March 20 th save house sparrow life.thisresearch will examine the effects of EMR on house sparrow & humans,childs using the methods and how to solve such a way of save future along with field study.The method covering section 3 morever ,the progress will be measured from the suggested method that's the field studies discussed.

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BIOGRAPHIES (Not Essential)

Author Photo-1 	Description about the author1 (in 5-6 lines) S.Rushil raaj *project student,* *Saradha metric higher secondary school,gingee,Tamilnadu,India* *rushilraaj@gmail.com* *7904871177*
Author Photo-2 	K.Yokesh sharma *project student,* *Saradha metric higher secondary school,gingee,Tamilnadu,India.* *yokeshsharma2020@gmail.com* *9994812466*
Author Photo-3 	A.vijaya kumar Pg assistant physics *,Saradha metric higher secondary school,gingee,Tamilnadu,India.* *vijay.kum307@gmail.com* *9751727262*

	P.Sathiya murthy *Saradha metric higher secondary school,gingee,Tamilnadu,India.* *sathiyamurthy84@gmail.com* *7358189522*
	E.Vinoth *Research schlolar ,Department of physics,government artscollege ,tiruvannamalai.* *Vinobrother1@gmail.com* *9843684266*
Author Photo-5 	, G.periyannan *Assistant professor,* *Department of physics,* *Shanmuga industries arts & science college,tiruvannamalai, Tamilnadu,India* *periyannan1993@gmail.com* *8870457543.*