

JOURNEY TO DELHI STATE BIRD! "THE HOUSE SPARROW"

When did the mankind meet the House Sparrow?

The journey of the House Sparrow started in Brooklyn, New York, in 1851. By 1900 it had spread to the Rocky Mountains. They were introduced in San Francisco and Salt Lake City in 1870s. This helped them to spread across the west. Now, House Sparrows are common in North America except Alaska and far northern Canada.

What is the importance of the House Sparrow to mankind?

House sparrow is important for both environment and mankind.

ENVIRONMENT:

Preys on insects, avoiding its attack on other plants

Form a major part of the food chain for other birds like magpies

Help in studying general biological problems, such as evolutionary mechanisms, temperature metabolism and pest control.

MANKIND:

House Sparrow, as is evident from the name, was originally a part of every home.

It is part of the culture of many religions.

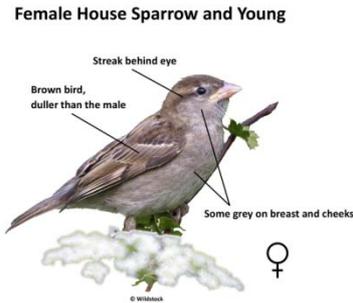
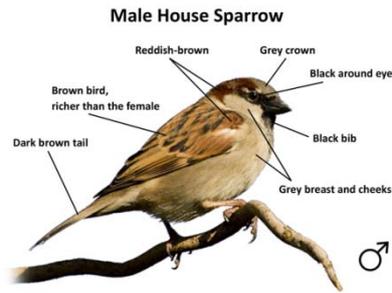
Acts as a green living component in a home by using our waste like cotton pieces, paper and others.

What is the scientific background of the House Sparrow?

The House Sparrow is of Kingdom Animalia, Phylum Chordata, belonging to Class of Aves, of the Order Passeriformes. They come from Family Passeridae of Genus Passer and their species is Species P. domesticus.

How does the House Sparrow look?

Use the following diagram to identify the male and female House Sparrow around you:



Where can we find House Sparrow in India?

Within India they can be found throughout the country till the Assam valley and the lower parts of south Assam hills. In the Eastern Himalayas, the Eurasian tree sparrow is more prevalent. Altitude wise their presence has been recorded till 1200m in Sikkim and up to 1000m in the hills of Peninsular India.

How does the House Sparrow sound?

The following sounds are used by almost all Sparrows:

(1) Chirping:

Soft chirping: The House Sparrow has short and incessant chirping call. This call has two aims: as a contact call by flocking or resting birds or by males to announce nest ownership and to invite pairing.

Shrill/loud chirping: Aggressive males produce a shrilled version of this call, transcribed as "chur-chur-r-r-it-it-it-it". This call is used by females in the breeding season, in order to establish dominance over males.

(2) Nasal alarm call: House Sparrows also generate a nasal alarm call, which sounds like a 'quer'. This is used during distress.

(3) Soft quee: An appeasement call, this is used to restrain aggression, generally between birds of a mated pair.

What are the different types of House Sparrow?

There are twelve subspecies of House Sparrow. These can be divided into two groups, the Oriental indicus group, and the Palearctic domesticus group.

Difference between the two groups: The birds of the domesticus group have grey cheeks, while indicus group birds have white cheeks as well as bright colouration on the crown, a smaller bill, and a longer black bib.

domesticus group

1. P. d. domesticus
2. P. d. balearoibericus von Jordans
3. P. d. tingitanus (Loche, 1867)
4. P. d. niloticus Nicoll and Bonhote, 1909
5. P. d. persicus Zarudny and Kudashev, 1916
6. P. d. biblicus Hartert, 1910

indicus group

7. P. d. hyrcanus Zarudny and Kudashev, 1916
8. P. d. bactrianus Zarudny and Kudashev, 1916
9. P. d. parkini Whistler, 1920
10. P. d. indicus Jardine and Selby, 1831
11. P. d. hufufae Ticehurst and Cheeseman, 1924
12. P. d. rufidorsalis C. L. Brehm, 1855

What kind of nest does the House Sparrow create?

Description of the nest: The centre of the House Sparrow nests is made of coarse dried vegetation. Then, they use finer material, including string, feather and paper, for the lining. The nests are often placed next to each other and the nests are also re-used. House Sparrows generally do not make houses in tree holes.

Placement of the nest: Holes of buildings and other structures such as streetlights, signs are often employed as space for nest. House Sparrows compete for nest boxes. They can even put out of the nest boxes of other species such as bluebirds and Tree Swallows.

About the nesting behaviour: The number of eggs given at once is between 1 to 8 eggs. About 1 to 4 survive and grow into broods. The length of the egg is generally 0.8–0.9 inches or 2–2.2 cm and the width is

0.6–0.6 inches or 1.4–1.6 cm. The period of incubation is 10–14 days and the time for nesting is 10–14 days. The colour of the eggs is light white to greenish white or bluish white, usually spotted with gray or brown. When the babies hatch, they are entirely naked with bright pink skin. Their eyes are closed and they are often clumsy.

What is the behaviour pattern of the House Sparrow?

Being a social bird, House Sparrow is very friendly during feeding. It also forms flocks with other types of bird and settles communally. They generally make nests in groups and associate with each other through activities like dust and water bathing, and "social singing". In social singing, birds call together in bushes. The feeding takes place on the ground and female House Sparrows are often dominant even if they are in small groups. The birds do not move more than a few kilometres. They also migrate within limited space. Bactrianus and parkini are two subspecies who migrate a lot. They also put on weight before migration.

What does the House Sparrow eat? What should you put on the verandah or balcony to attract them?

The adult House Sparrow generally feeds on the seeds of grains and weeds. They can adapt their feeding pattern according to the conditions. They can surprisingly perform bizarre tasks like go through house doors to the kitchen and others to acquire food. The House Sparrow uses grit to digest the hard seeds it eats. Grit is usually a stone or the shells of eggs or snails. They eat almost any seed, but when there is a choice, they prefer oats and wheat. They depend on human beings in urban areas and bread is more likely to be consumed here. They also eat seeds, including buds, berries, and fruits such as grapes and cherries. This bird also feeds on insects like beetles and caterpillars. Young House Sparrows generally eat insects for about 15 days after hatching. They can also be given small amounts of seeds, spiders, and grit.

What is the breeding pattern of this bird?

After hatching, the House Sparrows can start breeding and thus, birds breeding for the first time are only a few months old and are rarely successful in raising young. The number of babies that survive after birth increases with age.

With the approach of the breeding season approaches, males start calling by nesting sites. When a female approaches a male during this period, the

male does what is generally called a pre-mating dance. He displays by moving up and down and at the same time, drooping and shivering his wings. He also pushes up his head, raises and spreads his tail and also shows his bib. Males may attempt to mate with females while calling or displaying. In reply, a female will take on an aggressive posture and attack a male. Consequently, she will fly away and the male will continue to pursue her. Other males can also at the same time pursue the female. The female chooses the male of her choice and gives a soft dee-dee-dee call to him. The male mounts the female (the act of copulation) until the female lays the eggs.

Is the House Sparrow monogamous, that is, mates for life?

House Sparrow is monogamous but males may sometimes have multiple mates, and bigamy is mostly controlled by aggression between females. Many birds cannot find a nest and a mate, and thus serve as helpers around the nest for mated pairs. This increases the chances of the helper being chosen to replace a lost mate. Mates who die during the nesting period get replaced quickly. The bond depends on the holding of a nest site, though paired House Sparrows can recognise each other away from the nest.

Who are the predators of House Sparrow? Do they also die from any major diseases?

Only about 45-65% of the adult House Sparrows survive. Young sparrows die at a high rate after leaving the aid of their parents. As they become older, the mortality rate reduces. Only about 20–25% of young birds survive to their first breeding season

Predation: The House Sparrow's main predators are cats. Many other animals prey on them, including corvids, squirrels and even humans. In many countries, House Sparrows are eaten! Accipiters and the Merlin are also major predators, though cats have a greater impact on House Sparrow populations. House Sparrow is also commonly killed on road.

Diseases: The bacterial pathogens that commonly affect human beings also affect House Sparrow. These include Salmonella and Escherichia coli. Salmonella is common in the House Sparrow and affects the bird generally in the spring and winter. These also lead to high number of deaths. The House Sparrow is also prone to avian pox and avian malaria. External parasites also attack but do not usually negatively affect the adult house sparrow.

What is the connection between human beings and Sparrow? How has the mankind led to decline in the House Sparrow?

The House Sparrow has been in contact with human beings for over 10,000 years now. Its importance is overshadowed by the lack of interest

bird watchers have on it and its labelling as a pest as it feeds on agricultural product. Most of the nations do not protect the House Sparrow by law. *India has taken a commendable step towards protecting the House Sparrow by calling it the State Bird of its capital, Delhi.*

House Sparrows have also been a victim of human cruelty. They are trapped, poisoned and the adults are shot. Often, their nests and eggs are destroyed and their nest holes are also blocked with porcupine wire or glue. We have forgotten that the House Sparrow is beneficial to humans as well as it eats insect pests. The House Sparrow is also eaten in many places! The House Sparrow has long been used as a food item. Sparrow pie was a traditional dish due to its association with aphrodisiac properties. Sparrows were also trapped as food for zoo animals. House Sparrows have been kept as pets in the past.

Is it true that the House Sparrow population has declined? Why?

Previously, the House Sparrow was on the Least Concern list for conservation on the IUCN Red List. However, their populations have been declining in different parts of the world. This started in North America, where the cause was said to be House Finch. The decline has been most severe in Western Europe.

In London, the House Sparrow has almost disappeared from the city. The numbers of House Sparrows in the Netherlands have dropped in half since the 1980s, so now the House Sparrow is even considered an endangered species.

There are various causes for the decline in their numbers:

- predation, especially by Eurasian Sparrowhawks;
- Electromagnetic radiation from mobile phones;
- Diseases;
- Shortage of nesting spaces in urban areas;
- One of the main causes is the inadequate presence of insect food for nestling sparrows;
- Declines in insect populations;
- The substitution of native plants in cities with introduced plants and parking areas;
- The introduction of unleaded petrol, which produces toxic compounds such as methyl nitrite.

World Sparrow Day is been celebrated on 20 March across the world since 2010 to bring attention to the condition of the House Sparrow and to appeal for its conservation.

ACTIVITY 1: do you know the name of House Sparrow in different Indian languages? Match the names to the correct languages!

1	Ghara chatia		A	Uttar Pradesh, Madhya Pradesh, Bihar, Chattisgarh and Uttarakhand
2	Kuruvi		B	Jammu and Kashmir
3	Chiri		C	Gujarat
4	Charai Pakhi		D	Maharashtra
5	Goraiya		E	Karnataka
6	Pichhuka		F	Urdu
7	Chaer		G	West Bengal
8	Chirya		H	Tamil Nadu and Kerala
9	Chakli		I	Punjab
10	Chimani		J	Orissa
11	Gubbachachi		K	Andhra Pradesh

Correct answers: 1-J, 2-H, 3-I, 4-G, 5-A, 6-K, 7-B, 8-F, 9-C, 10-D, 11-E

ACTIVITY 2: LET'S COOK A CAKE FOR OUR BIRD!

Materials required: Good quality bird seed; raisins; peanuts; grated cheese; suet or lard; waste paper cup; string; mixing bowl; scissors.

Step 1: Carefully make a small hole in the bottom of a waste paper cup. Thread string through the hole and tie a knot on the inside. Leave enough string so that you can tie the pot to a tree or your bird table.

Step 2: Allow the lard to warm up to room temperature, but don't melt it. Then cut it up into small pieces and put it in the mixing bowl.

Step 3: Add the other ingredients to the bowl and mix them together with your finger tips. Keep adding the seed/raisin/cheese mixture and squidding it until the fat holds it all together.

Step 4: Fill your yoghurt pots with bird cake mixture and put them in the fridge to set for an hour or so.

Step 5: Hang your speedy bird cakes from trees or your bird table. Watch for greenfinches, tits and possibly even great spotted woodpeckers.