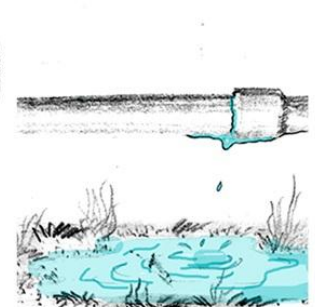
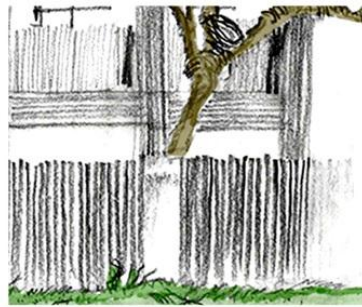
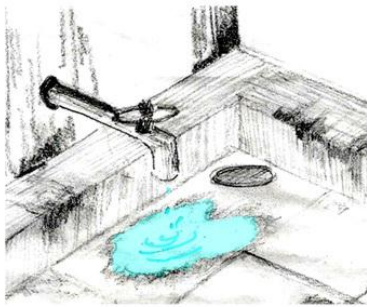


# Life of a sparrow

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Landscape Environment Advancement Foundation, LEAF



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## AIM OF THE STUDY

This research aims at studying the following aspects within the city of Ahmedabad:

- Identifying a few sites where sparrows are found in Ahmedabad and categorizing them based on parameters such as density of the built, function and characteristics of place.**
- Studying the sites based on conditions which are necessary for a sparrow to thrive in order to analyse and find characteristics of the most ideal habitat for a sparrow in the given area.**
- To find the factors for their habitation in a particular area (from a detailed case study of Sardar Vallabhbhai Patel Research Institute)**

## STUDY PARAMETERS

The following parameters define the micro level classification of the site. These parameters are chosen on the basis of background research done on the basic requirements of a sparrow for habitation.



### **Percentage of trees in the area**

*(The parameter is measured keeping the total area observed, as 100%.)*



### **Percentage of open ground**

*(The parameter is measured keeping the total area observed, as 100%.)*



### **Number of feeding places**

*(The parameter is measured by counting.)*



### **Locations where nest building is observed**

*(The parameter is measured by counting.)*



### **Level of quietness or loudness**

*(The parameter is measured using a decibel meter. An average from 5 readings is made and the level of loudness is determined from the standard decibel scale ranging from 0 to 130. 0 being the lowest sound and 130 being the highest sound.)*



### **Average number of sparrows spotted**

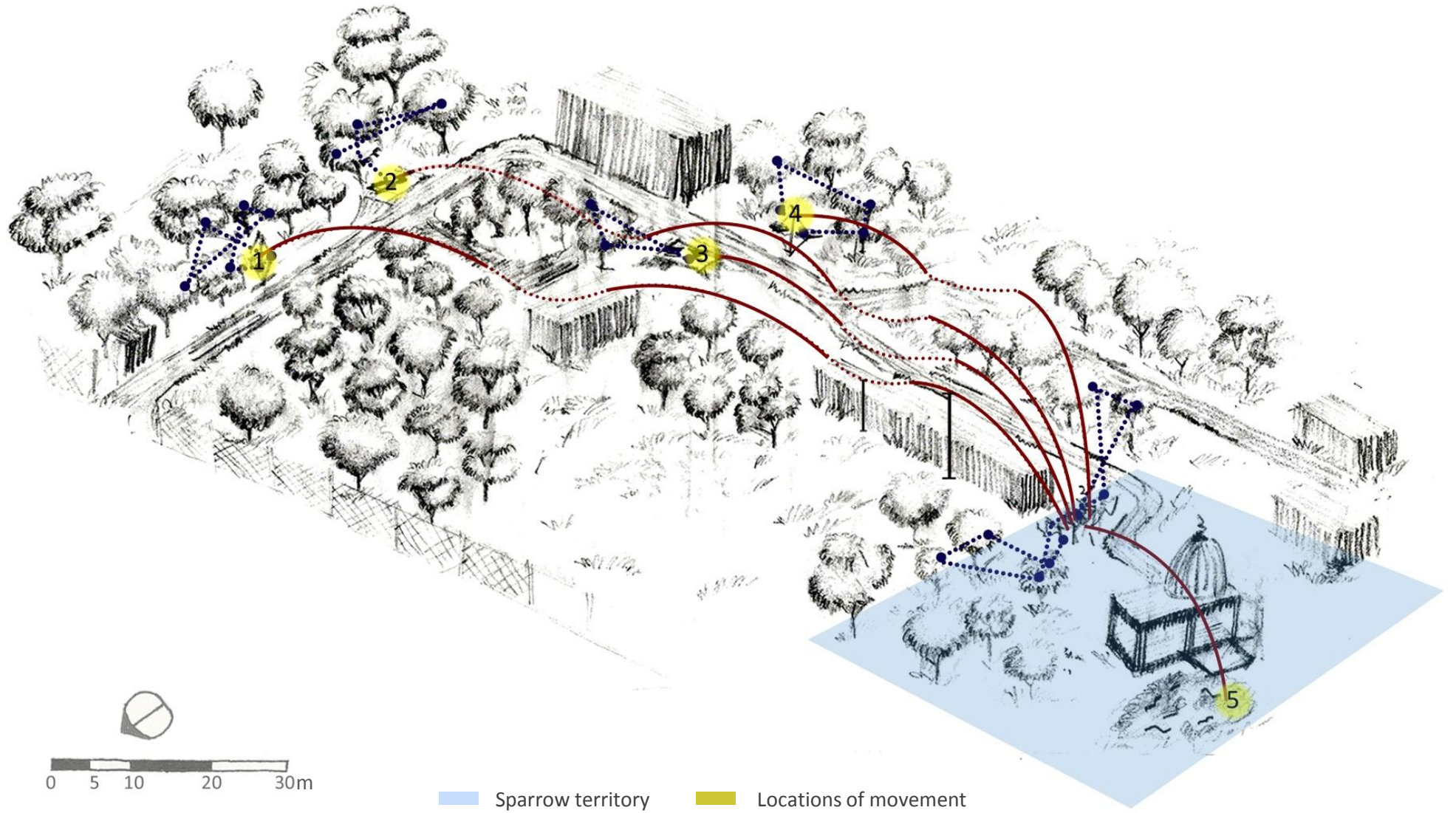
*(The parameter is measured by counting sparrow numbers from 5 readings taken each day over a period of 3 hours for 3 days and an average is made.)*



### **Average number of humans**

*(The parameter is measured by counting number of people at marked location. An average is made from 5 readings taken each day over a period of 3 hours for 3 days at each location and totalled.)*

# SPARROW MOVEMENT



### Flights taken

- Flight line  
More speed greater height
- ..... Flight line  
Less speed lesser height
- ..... Movement within the given location

### Location 1,2

Activity – Feeding and foraging

Average time spent by a sparrow in the duration of one hour – 15 minutes

Frequency of displacement in one hour - 5

### Location 3,4

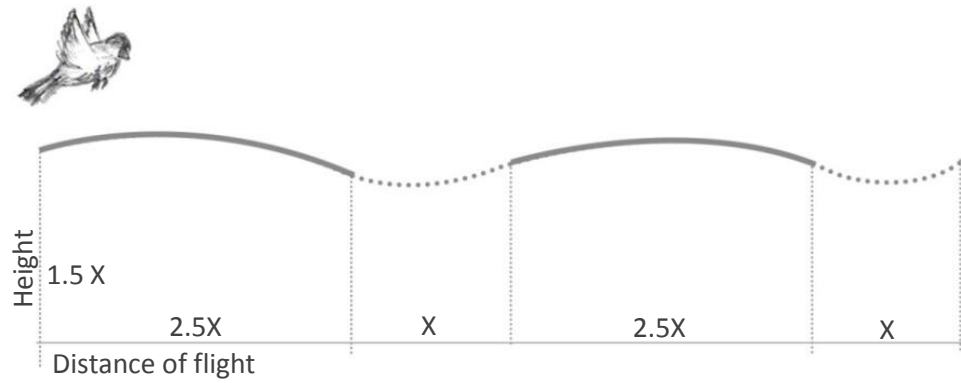
Activity – Feeding, foraging and flock chirping

Average time spent by a sparrow in the duration of one hour –25 minutes

Frequency of displacement in one hour – 5

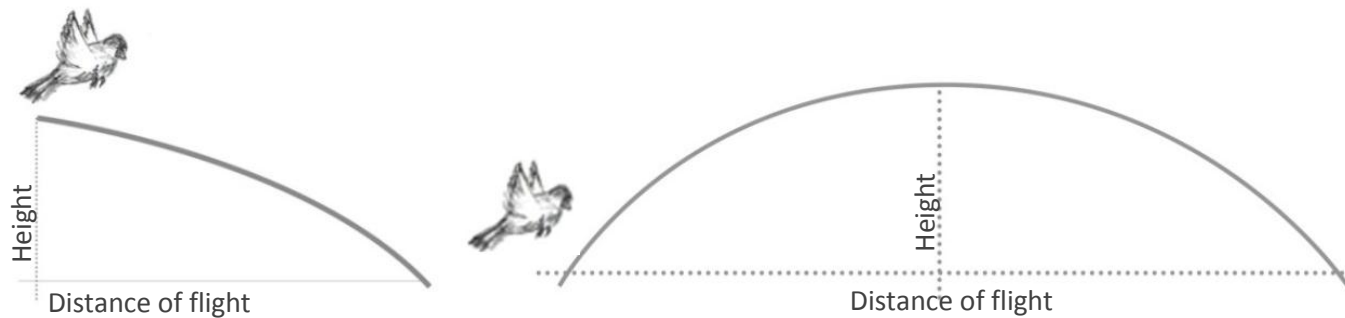
- A peculiar pattern with respect to speed of flying and the height at which the sparrows fly is observed.
- The flight is seen to originate from the residing point in search of food and water feeding places.
- Four feeding places are located where the sparrows fly for food and water.
- The sparrows are seen to only move to the local trees which are within the radius of 20 meter, from the feeding place for chirping.

## OBSERVED FLIGHT PATTERN



### LONG DISTANCE FLYING PATTERN

- Flying pattern of the sparrow for long distance is linear.
- Since the bird does not see the target it slows down its speed at regular intervals and a flight pattern is observed.
- Along with the speed, the height of the flight is also seen to reduce slightly, creating a wave pattern in elevation.
- This type of flying pattern is observed when the target is not in sight of the bird or for distances more than 7-8 meters.



### SHORT DISTANCE FLYING

- Short distance flight line resembles a parabolic curve.
- These flights are taken when the target is in sight without hurdles in between.
- The speed here is seen to remain constant and the height keeps on increasing at first and then decreasing.
- Short flight is observed when the flight distance is less than 8 meters.



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