TREE CENSUS REPORT

SARVAPRIYA VIHAR (5-15)

Contents

The Importance of Trees

The one constant on Earth is the amount of land that is available. All over the Earth, the proportion of forests and tree cover is shrinking due to the growing requirement for urban development. Trees are being cut to clear land for buildings, for vehicular parking, for fuel & paper, and for a myriad of other applications. To make matters worse, this quantum of land is also reducing due to the rise in sea levels.

Trees are not a luxury but a necessity as they provide the very oxygen we breathe. They are our lungs - one tree can store as much as 140 kg of CO_2, thus keeping our air healthy. They also help in cleaning the air (by trapping dust), in reducing energy usage (by cooling down the surrounding area), and by providing a habitat to thousands of species of insects, animals, birds, fungi, and small plants. Additionally, just being in their presence induces a feeling of wellbeing and destresses us.

Thus, to survive and to keep the planet habitable, we must replace whatever we have depleted and grow (not just plant) even more trees.

For these reasons, the maintenance of existing tree cover in any urban setting is essential and should be a fundamental part of city planning. There is also an urgent need to increase the number of indigenous trees, as they are part of the natural eco-system of that region are in harmony with dependent organisms and weather conditions.

The Need for a Tree Census

The city of Delhi has an estimated tree cover of just 11.9%. This falls well short of global standards, which recommend a minimum of 15% tree cover for cities that have a population of more than 1 million people.

Due to the increasing concretisation of sidewalks and inner-colony lanes, the bases of urban trees have become choked over the years, which weakens the tree as it prevents the natural circular expansion of the tree trunk. Further damage is caused by the lopsided cutting of branches (to make space for overhead wires or to avoid abutment on balconies), which cause trees with an already-weakened base to topple over during storms and strong winds. Each heavy storm or squall fells a minimum of two or three fully-grown trees, further diminishing our life-giving cover.

A tree census offers a simple and effective method of providing data as to the number, type, and health of trees in a neighbourhood, allowing an accurate assessment of whether there is sufficient local tree cover as per global guidelines. It also helps us become aware of the importance of trees in our surroundings, while also helping identify any existing problems that need to be corrected.

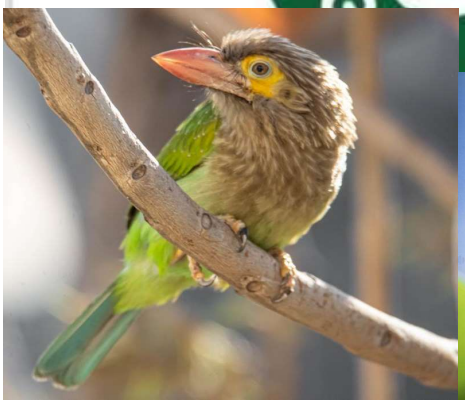
A tree census is a continuous process that offers a time-based snapshot of the trees in the neighbourhood, offering a detailed view of the changes over time. This allows for quick comparisons to the earlier condition of the tree and also facilitates quick changes to any current problems.

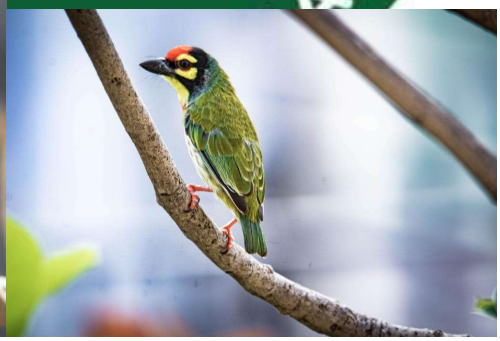
Sarvapriya Vihar

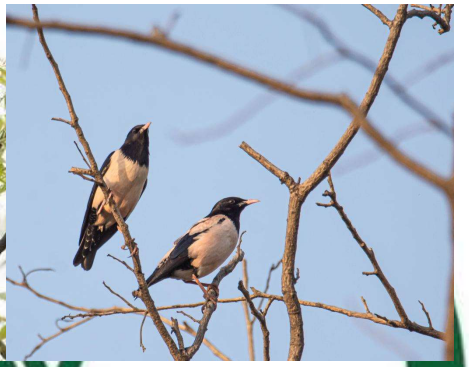
Sarva Priya Vihar (SPV) is a small colony adjoining two important historical structures dating back to the city of Jahanpanah (circa 1326 CE) – the Begampur Mosque and the Bijaymandal Palace.

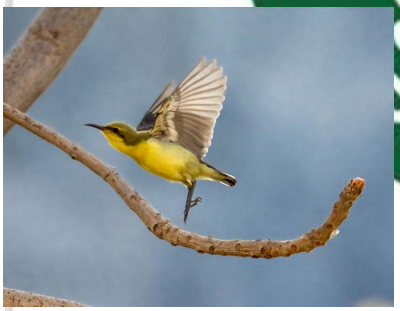
Sarva Priya Vihar RWA oversees streets 5 to 15 of the colony, which are populated by around 300 household units, with an approximate population of 1,000 people. These 10 streets have 4 parks within their boundaries, as well as two parks adjacent.

The parks are blessed to have a rich bird life and more than 30 species of birds have been identified here. This indicates that our green cover is enough to attract, support and sustain this large variety of avian species.









Tree Census in SPV

A group of environmentally conscious residents of our small neighbourhood formed a 'Green Team' in 2018 to undertake various initiatives aimed at improving the environmental conditions within and around the colony.

We started projects promoting the ban on single-use plastics in daily use, segregation of waste, composting of household green waste, conducting workshops for children, and finally decided to **venture into studying and protecting the trees around us.** We were also inspired by the accomplishments of 'Compassionate Living' and its Managing Trustee, Ms Padmawati Dwivedi, in promoting ecological awareness amongst citizens.

In June 2022, this phase of the census was started in earnest. The inspiration came when visitors to the colony showed appreciation of our trees, including a Mahua tree – its cycles of flowering & fruiting and the visits of flying foxes offered a glimpse into the stunning and teeming life that goes on around us (of which we are often unaware).

In consensus with the SPV RWA, we made an initial foray within our colony, using her existing template for the tree census.

The SPV team for the tree census had one thing in common - a love for Nature. It was made up of the following members - Aruna Sharma, Veena Rewal, Swadesh Chopra, Kanta Gupta, Shobha Rathi, Alinda Holla, Shikha Agarwal, Fabian Panthaki, and Tarun Agarwal. The field work for our census was from 15 July 22 to August 2023.

Objectives

Our objectives behind the Tree Census were:

- To ensure the health of the existing trees by deconcretising/detiling the area around the base to make it stronger;
- To treat diseased trees;
- To replace trees which have fallen;
- To increase our tree cover wherever possible;
- To plant more indigenous trees like mahua, neem, siris, imli, shisham and mango.

Methodology

For the purposes of this tree census, we used a pre-existing template formulated by the Compassionate Living group, which consisted of 18 separate data points.

A group of three or four members would set out with a tape measure, a log-book, a pen, and lots of commitment and enthusiasm. We would note various details in the log-book, such as the location of the tree on the street, the height and girth of the tree, the presence of flowers and fruits/pods, the health of the tree, the presence/absence of termites, whether it had nails or wires embedded, and (most importantly) the conditions of the ground around the base of the tree.

Statistics

As of November 2023, there are **211 trees** currently growing on the streets 5 to 15 of Sarvapriya Vihar (including the main entry road into the colony). The trees belong to diverse species and show large variance in terms of height, girth, health, and other characteristics. Some of these specifics are broken down below.

Types of trees

Our census recorded a total of **32 distinct tree species** within the specified streets, highlighting the diversity around us. Of these, **20 species** are indigenous, and they account for **163** of the total number of trees surveyed (or **~77%**), which is an encouraging figure given the need for more indigenous trees.

No. of Trees	Species of Tree
1	Arjun Banyan Betel palm Bel Casuarina Coppperpod Cycas Palm Fishtail Palm Kaner Putranjeev Raintree Sharifa Sheesham
2	China Berry/ Persian Lilac Gullar Pilkhan Rubber Plant Silver Oak
3	Sembal Harshringar Jamun Moulshree
4	Champa Palm
5	Bottle brush Ficus
10	Amaltas Mulberry Neem
26	Gulmohur
33	Alstonia
43	Ashok

Height of trees

The census highlighted that there are a large number of high-growth trees within the lanes covered, with a full 50 trees (around 24% of all the trees covered) being taller than 40 feet, with two trees standing well beyond 50 feet in height. This underlines the need to protect these trees in particular by ensuring enough space to grow at the base and eliminating any nails etc.

Height of tree	Number of trees
Less than 10 ft	5
10ft to 15ft	32
15ft to 20ft	20
20ft to 25ft	24
25ft to 30ft	29
30ft to 35ft	20
35ft to 40ft	30
40ft to 45ft	32
45ft to 50ft	16
50ft+	2

(Note: These heights are an approximation and were made using nearby structures as references)

Condition of Tree

The biggest problem with urban trees is the 'choking' of the tree base. For a tree to be healthy, it is government-mandated that an open area of **1.25m x 1.25m** be present around its base. This is the minimum area needed for the tree to grow healthily both vertically and horizontally, without any risk of it becoming top-heavy and be at risk of toppling over. This open area is also necessary for water to seep into the open soil, without which the tree's roots will wither and die.

Our census found **22 trees** whose bases are **concretised** right up to the tree trunks, with a further **34 trees** whose bases are **tiled** right up to the tree trunks. A further **62 trees** had their bases with just about 1sq. ft. of open space. Another **11 trees** were found to be diseased, having been infected by **termites,** while **7 trees** were found to have **nails** in them. Remedying the condition of these trees will be a priority, to ensure the continued (and healthy) growth of these trees.

Finally, **59 trees** were found to be **heavily lopped**, with their branches being cut poorly to make space for wires or to avoid falling on the road. These will require delicate attention, to try and balance out the growth of the tree with civic amenities for residents.