# CITY BIRD SANCTUARY CHANDIGARH

# **MANAGEMENT PLAN-2018**





Department of Forests and Wildlife UT Administration, Chandigarh











**FOREWORD** 

In a casual discussion, the Chief Conservator of Forests, Forest

Department, UT Administration, Chandigarh entrusted me this

responsibility to look into and write a Management Plan for the City Bird

Sanctuary Chandigarh (CBS) a few months back. This being a 3.0 hectare

area did not have much options, nevertheless task had to be

accomplished.

In four to five visits to the CBS, which is known as Tota Park or

Parrot Garden in common parlance, whatever I could gather, I have tried

to put down. Since parrots have selected this park as their roosting place,

it is the awareness of neighboring area citizens that Government paid

heed to their demand for recognition of parrots roosting in sec 21 park and

ameliorating conditions conducive for parrots continuity there i.e. their

conservation.

I hope this will meet out the requirement of the Department to put in

efforts for parakeets continuity there as long as other unforeseen

inhibitions do not set in.

I am thankful to the Forest Department for providing me this opportunity.

Chandigarh, 16<sup>th</sup> December, 2018

(Dr. Harsh Mitter)

Retd. PCCF(WL) HP

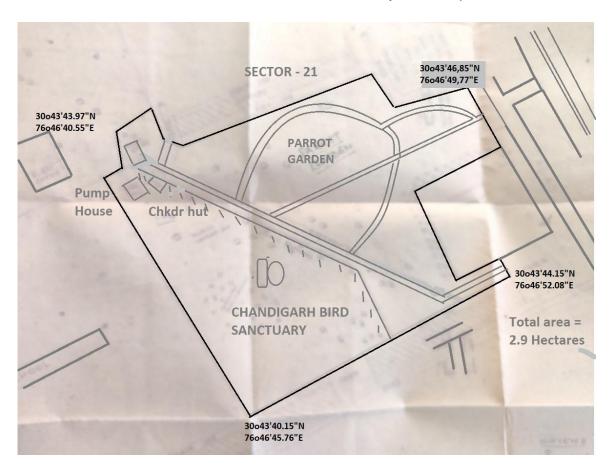
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#### INTRODUCTION

In 1975, Shri S.K. Sharma, Secretary, Environment Society Chandigarh observed that Green Parakeets were flying over old Ropar – Ambala road in an East – West corridor which happens to be passing over sector -21 park, have found a new home there for roosting i.e. spending night there. It was estimated that there were as many as 25000 green parakeets. Increased urbanization/ heavy construction activities in adjoining Chandimandir, Manimajra & Panchkula creating disturbing conditions for their ecology had urged the parakeets to find sector-21 park as a new home. He proposed to the Government to create a wildlife sanctuary in that park.



(Map of the Chandigarh Bird Sanctuary, Sector-21, Chandigarh)

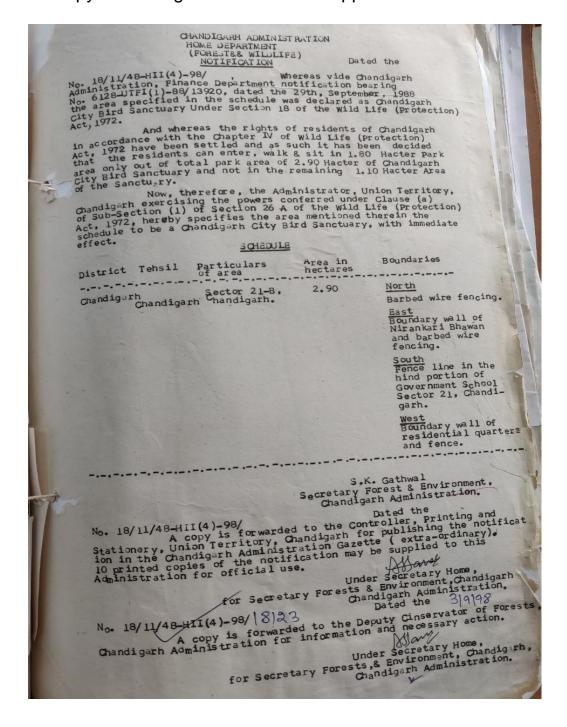
This led the Chandigarh Administration to initiate a process to create first of its kind in the country, a 3 hectare –urban wildlife sanctuary (2.9 Ha. to be precise) in the heart of the city, which is surrounded by the buildings all around. Manifestation of this change led to the changing the nature of park from ornamental to the environmental, requiring natural surroundings. Thus, it was decided that the park be shifted from UT Horticulture Department to the Forest Department.

Continuing efforts on the part of Environment Society finally led UT Administration to declare much cherished **urban wildlife sanctuary** as a second wildlife spot in city Chandigarh, a sequel to earlier declaration of Sukhna wetland. It was anticipated that this sanctuary would promote and inculcate love for birds in general; especially amongst the children.

In common parlance, this has come to be known as Parrot Garden or "Tota Park".

#### STATUS OF THE PARK

Chandigarh Administration declared 2.9 hectare area of sector 21 park as **Chandigarh City Bird Sanctuary** on 29<sup>th</sup> September, 1988. Copy of the original notification is appended as below-



# CHAPTER-3 FLORA & FAUNA

Following other species of **avi-fauna** have been noted in the CCBS in addition to the green parakeets at the time of its creation:

Common Myna, Brahminy Myna, Seven sisters, Grey Wagtail, Grey Hornbill, Blue Rock Pigeon, Indian Robbin, Red vented Bulbul, House Sparrow, Bush Chat, Starling Hoopoe, Ring Dove, Green Bee Eater, Spotted Owlet, Flower pecker, Purple Sun bird.

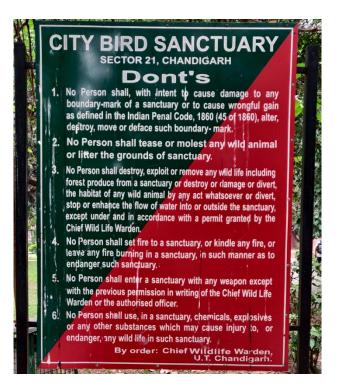
Now, it is known that three species of the parrots roost in this park. In addition to Green Alexandrin Parakeets (Psittacula eupatria), rose-ringed parakeets (Psittacula krameri) and peach headed parakeets (Psittacula cyanocephala) are also seen in this park.

- **3.1 Flora:** Amongst flora, following trees, shrubs or herbs are seen in the sanctuary:
- **3.2 Trees**: Ficus infectoria, Syzygium cumini, Schleichera oleosa, Morus nigra, Terminalia arjuna, Sepium sebiferum, Terminalia bellerica, Dalbergia sissoo, Thuja compacta, Cinnamomum camphora, Ficus religiosa, Psidium guayava, Mangifera indica, Casuarina equisetifolia.
- **3.3 Bushes**: Bougainvillea, Gardenia, Jasminum oleosum, Ixora, Malvaviscus. *Hibiscus rosa-sinensis*

**3.4 Ground Flora**: It mainly consists of grasses such as *Cynodon dactylon*, *Dicanthium annulatum*, *Bothriochloa*, *Echinochloa colonum E. spicigera*, *Digitaria*, *Pespelum*, *Pespelidium*, *Dactyloctenium aegypticum*, etc.

Others such as Sida cordifolia, S. rhombifolia, Launea, Tridex, Tribulus terrestris, Rivina humilis, Justicia simplex, Peristrophe bicalculata etc.

Main species which provide shelter to Parakeets are deeply foliage trees such as Ficus infectoria, Syzygium cumini, Morus alba and Schleichera oleosa. Former three definitely provide a conducive niche for the parakeet by way of providing fruits for nibbling to the parrots. Main faunal and floral species have been mentioned in **Annexure-1 and 2**.



(List of activities prohibited in the Sanctuary)

# STRUCTURE / JUXTAPOSITION OF RESOURCES IN THE SANCTUARY & PARK

#### 4.1 The Sanctuary:

The sanctuary occupies an area of 1.8 Ha and is surrounded by a wall separating it from the Park. The sanctuary has a water pump of MCPH at on end on western side. The area has a cutcha undefined path in the sanctuary covering about half the area. The remaining area is inaccessible due to overgrowth of the ground vegetation as also in the remaining part. A 30-year closure of the area has converted this part as a natural forest. Competition among the trees have really grown them into tall trees with also complete shade on the ground. Most of the tall trees have large canopies, thus enclosing large volume there. This appears to be a conducive factor for parrots to roost there and a kind of protection afforded from the predators such as vultures requiring large or clear space for the hunting of smaller birds. On the other hand, tall trees with large canopies have led to suppression of light demanders rejuvenation. Even planting of saplings in the under canopy has led to stunted growth of such trees such as Psidium guayava, Mangifera saplings etc.

A vulture nest is seen on a high branch of *Ficus religiosa* with a pair of vultures sitting on the top of the tree; which otherwise appears to be the tallest tree in the area. It will be interesting to note its impact on

parrot population there. Regular daily basis observations are required on predation of birds and parrots in particular and location on the Google Earth map is shown below-



MOVEMENT OF PARROTS IN THE EVENING AT 04.00 PM IN MID DECEMBER, 2018



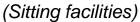
There is a shallow water point created and fed with a rubber pipe from the pump. There are 3 to 4 benches placed at various locations in the sanctuary but in the dilapidated shape. The kutcha path is half way sunken into a shallow pond created by the excessive water inflow from the small gate opening in the park which appears to be draining south-westward into the sanctuary due to natural slope and in the eventuality of rainfall.

#### 4.2 The Park:

Outside the sanctuary towards North, about a hectare land is left out as Park, which is often frequented by the residents of sec 21

neighboring areas. This is well maintained by the Municipal Corporation with suitably developed walking trails, benches, trimmed lawns interspersed with trees, shrubs, flowering plants, lianas and hedges. These trees are actually well crowded by the parakeets.





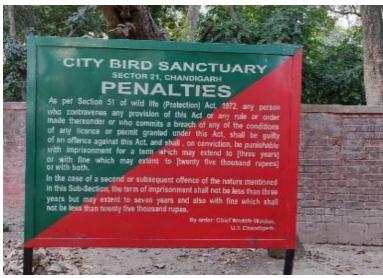


(Existing waterhole)

#### 4.3 Movement of Parakeets:

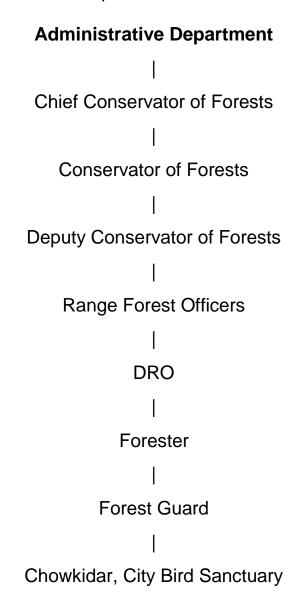
While returning to the roost, parakeets follow a pattern of movement within the park area which has been depicted diagrammatically over the GE imagery.

## 4.4 Penalty Provisions



#### **ADMINISTRATIVE SET UP**

UT Forest Department set up is as follows:

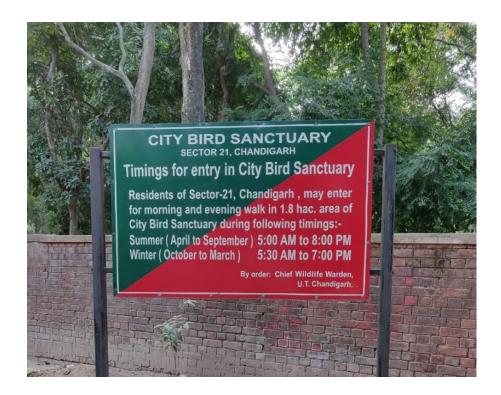


This chowkidar is posted in the Bird Sanctuary for the last 08 years and his name is: Ramesh Giri. He has a kutcha hut there in for the stay at night.

#### **EXISTING MANAGEMENT PRACTICES**

Following are the major management practices followed at present

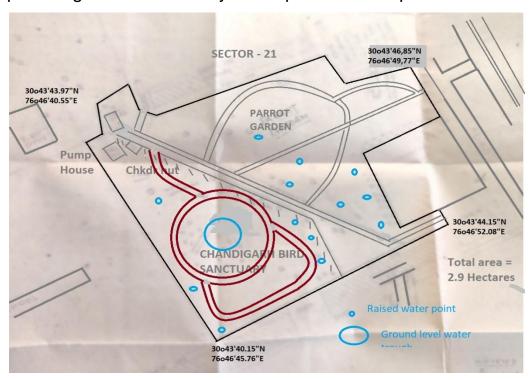
- Sanctuary has been left to grow on its own. No felling / removal have been carried out in the sanctuary area since inception.
- 2. No development activities have been undertaken for the fear that Parrots may not get disturbed and find another resort.
- 3. Supplementing by way of planting saplings of Guava, Mango and Mulberry has been carried out.
- 4. Shallow water body is regularly filled and is supposed to provide water to the birds.
- 5. Door is supposed to be remain open from morning till evening according to the summer and winter schedule.



#### **PRESCRIPTIONS**

Following are the major management practices followed at present-

- 1. Sanctuary part left to nature has profuse undergrowth with *Rivina humilis* as predominating ground flora. It is a weed, which might be providing food to birds. There is young recruits to pole size plants of almost any and every tree species. However, *Putranjiva roxburghii* is the predominating species amongst the recruits.
- 2. Two circular paths can come up duly lined. Construction work be restricted to 9AM to 4PM time frame causing no disturbance to avi-fauna (as below). Along the path, low lights similar to that of park can be placed/ affixed. This might be providing sense of security to the parrots in the park area.



(Proposed Path and water points Benches to be affixed along the path in CBS)

- 3. 4 to 6 feet raised flat water pots be placed both in the Park area as well as sanctuary area. This will avoid use of water by the stray dogs and thus avoid transmission of diseases. Presently earthen pots left at ground level are being used by the dogs.
- 4. Ground predators are the dogs and avi-predators are the nesting vultures on the high perch of *Ficus religiosa* in the walled part. Nest requires to be removed from the area as it is posing a potential threat to parrots. Accordingly, parrots have moved to central part of the park than sanctuary.
- Excessive regeneration is required to be checked and openings created for light on the floor of the forest in sanctuary area.
- 6. A shallow water trough (6inches deep) of about 15 to 20 feet diameter can be created in the middle of the sanctuary area for water availability to avi-fauna. This and other higher perched water pots can be filled by the chowkidar on daily basis.
- 7. All plants be labeled with plastic plates and springs with computerized print outs of the names or ground affixed plates. A large enough pictorial board consisting of names of birds with photograph affixed for the knowledge of public with little description of habit and habitat and feeding habits of birds.
- 8. Separate financial forecast is not required. For the above development works, some 12 to 15 lakhs rupees can be spared in the financial year or planned in the next financial year.

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# ANNEXURES

## 'Annexure-1'

## **LIST OF SPECIES**

#### **PLANTS**

#### **TREES**

Botanical names	Vernacular
Aegle marmelos	Bael
Albizzia lebbek	kala siris
Azadirachta indica	Neem
Cassia fistula	Amaltas
Citrus lemonia	Lemon
Dalbergia sissoo	Shisham
Eucalyptus citriodora	Safeda
Eugenia cuspidate	Jamoa
Ficus bengalensis	Bargad
Ficus carica	Anjeer
Ficus religiosa	Peepal
Mangifera indica	Mango
Mimosops elengi	Mimosops
Musa paradisica	Banana
Phyllanthus ambelica	Amla
Polyalthaea longifolia	long ashok
Psidium guayava	Guava
Putranjiva roxburghii	Putranjiva
Schleichera oleosa	kusum
Syzygium cumini	Jamun
Terminalia arjuna	Arjun
Terminalia belerica	Baheda

#### **SMALL TREES, SHRUBS & LIANAS**

Botanical names Vernacular

Bougainvillea sp Bougainvillea

Crataeva religiosa Crataeva

Cuscuta sp. Amarbel

Diospyros ebanum Persimon

Ixora sp. Ixora

Momordica crantia Karela

Monistera sp. Money plant

Murraya koenighii Curry patta

Thevetia peruviana Yellow kaner

Tinospora cordifolia Giloe

#### **HERBS& GRASSES**

Botanical names Vernacular

Achyranthes asper Putkanda

Aloe vera Ghritkamari

Arthraxon sp. Grass

Caryophyllum sp. Weed

Colocassia sp. Arbi like

Conyza sp. Weed

Croton sparsiflorus Croton

Curcuma longa Haldi

Echinocloa colonum Grass

Eragrostris sp.

Euphorbia Euphorbia

Malvaviscus sp. Malvaceou Herb

Oxalis sp. Khatti-meethi buti

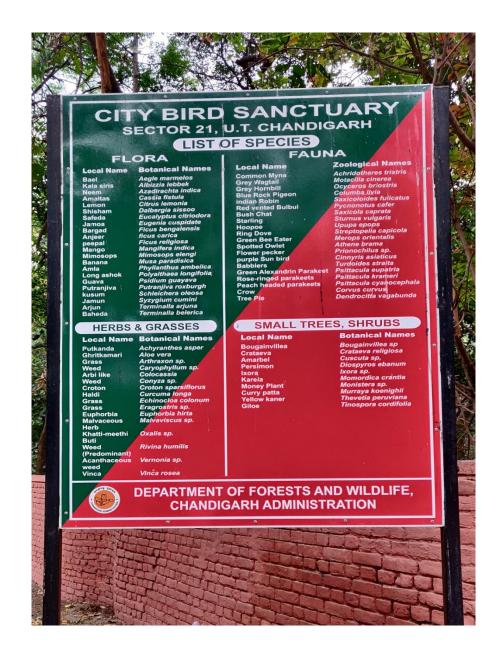
Rivina humilis Weed (Predominant)

Vernonia sp. Acanthaceous weed

Vinca

Grass

Vinca rosea



#### 'Annexure-2'

#### **AVI-FAUNA**

#### **LIST OF SPECIES**

Vernaculars Zoological names

Common Myna Achridotheres tristris

Grey Wagtail Motacilla cinerea

Grey Hornbill Ocyceros birostris

Blue Rock Pigeon Columba livia

Indian Robin Saxicoloides fulicatus

Red vented Bulbul Pycnonotus cafer

Bush Chat Saxicola caprata

Starling Sturnus vulgaris

Hoopoe Upupa epops

Ring Dove Streptopelia capicola

Green Bee Eater Merops orientalis

Spotted Owlet Athene brama

Flower pecker Prionochilus sp.

Purple Sun bird Cinnyris asiaticus

Babblers Turdoides straita

Green Alexandrin Parakeets Psittacula eupatria

Rose-ringed parakeets Psittacula krameri

Peach headed parakeets Psittacula cyanocephala

Crow Corvus corvus

Tree Pie Dendrocitta vagabunda

## 'Annexure-3'

# Major species of the City Bird Wildlife Sanctuary





**Green Parakeets** 

**Rose ringed Parakeets** 







Peach Headed







#### **DEPARTMENT OF FORESTS & WILDLIFE CHANDIGARH ADMINISTRATION**

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