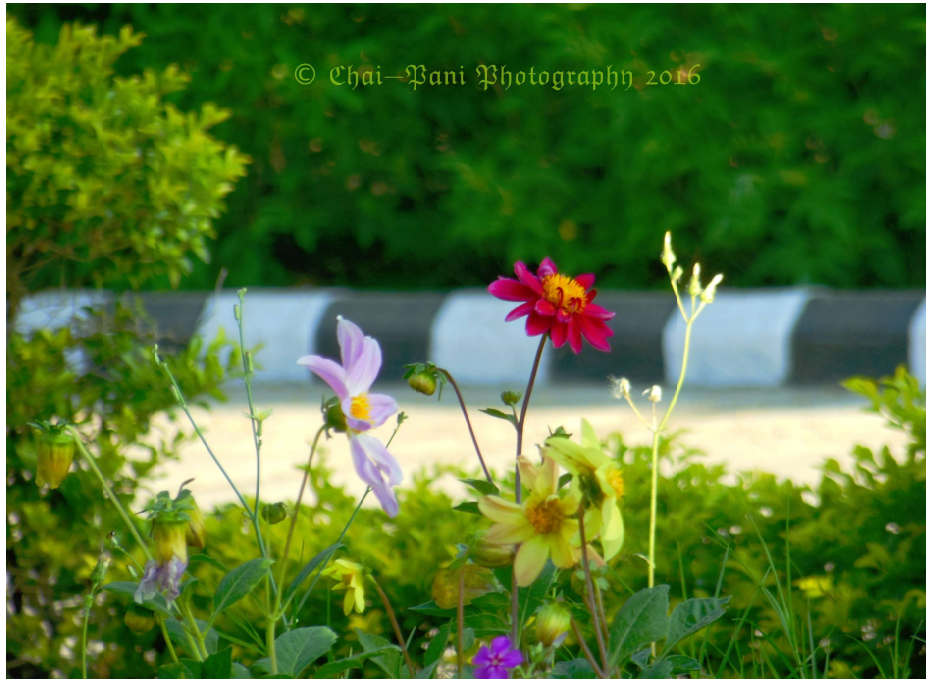


# Flora & Fauna



JUET's 100 Acre sprawling campus has over 25 species of flowers and a vast variety of trees and plants. Flower plants are locally prepared in our Campus Nursery.

Meticulous care which goes on almost 8-10 Hours per day through out the year is clearly visible when you take a stroll inside the Campus.. As season changes, Campus also changes its floral ornaments.

# Flora & Fauna



1. Marigold (Local: Genda) *B: Tagetes Erecta*

2 Damask Rose (Local: Gulab) *B: Rosa x damascena*

3 Calendula *B: Calendula officinalis*

4 Sweet William *B: Dianthus barbatus*

# Flora & Fauna



L



R

L: Fuzz Weed (Fleabane), *B: Erigeron annuus*

R: Powder Puff *B: Calliandra bella*

# Flora & Fauna



L



R

L: Vinca Rosea B: *Catharanthus roseus*

R: Chrysanths B: *Chrysanthemum*

# Flora & Fauna



L

R

L: Wild Bugle Lily B: *Gladiolus Hybridus*

R: Waterlily Dahlia B: *Dahlia pinnata*



L

R

L: Vervain

R: Guldaudi B: *Chrysanthemum*

# Flora & Fauna



Photographed By Dr Mahesh Kumar mahesh.chahar@gmail.com

L



Photographed By Dr Mahesh Kumar mahesh.chahar@gmail.com

R



Photographed By Dr Mahesh Kumar mahesh.chahar@gmail.com

L



Photographed By Dr Mahesh Kumar mahesh.chahar@gmail.com

R

L: White Frangipani (Local:Champa) *B:Plumeria Alba*

R: Hollyhock (Local: Gulkheira) *B: Alcea rosea*

L: Spider Lily (Local: Nag Damini)

*B:Crinum Pedunculatum*

R: Hollyhock

# Flora & Fauna



L

L: Rapeseed (Local: Gobhi Sarson) B: *Crinum pedunculatum*



R

R: Sweet Alison (Also known as Sweet Alyssum, Lobularia) B: *Lobularia maritima*

# Flora & Fauna



Photographed By Dr Mahesh Kumar mahesh.chahar@gmail.com

L

L: A Variety of Petunia



Photographed By Dr Mahesh Kumar mahesh.chahar@gmail.com

R

R: Verbena



# Flora & Fauna



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L



R

L: Rangoon Creeper(Local: Madhumalati) B: *Combretum indicum*

R: Garden Phlox/Plumbago/Cape Leadwort (Local: Nila chitrak) B: *Plumbago auriculata*

# Flora & Fauna



L: Gulmohar Flower B: *Delonix regia*

R: Chinese Rose (Local: Gurhal)  
B: *Hibiscus rosa-sinensis*:



# Campus Greenery



**A Typical View of Campus Roads in Autumn**

# Campus Greenery



**Academic Blocks at a Glance**

# Campus Greenery



**Campus in Spring**

# Campus Greenery



graphed By Dr. Mahesh Kumar mahesh.cbahar@gmail.com

# Campus Greenery



**Area near the Tagore Hall**

# Campus Greenery



**JUET Campus has approximaetly 5 Km of Pathway for Walking**



# Campus Greenery



Cleanliness in Campus

Photographed By Dr. Mahesh Kumar [mahesh.chahar@gmail.com](mailto:mahesh.chahar@gmail.com)

# In-House Cultivation



In the past couple of years the Campus has become quite self-sufficient in producing fruits, vegetables and some grains for consumption. Apart from patches of the Land at the borders of Campus, it has 2 acre land exclusively meant for farming, where following items are cultivated.

- Cabbage, Brinjal, Bhindi(Okra), Tomato, Bottle Gourd etc.

# In-House Cultivation

## Fruits

- Mango 15 quintal (In a season)
- Guava 1 quintal (In a season)
- Lemon 10 Kg/month
- Papaya 40 Kg/ month
- Amla 10 quintal (In a season)

We also have a few trees of

- Pomegranate
- Mulberry (Shehtoot)



# In-House Cultivation

- Wheat 100 quintal in 5 Acre area
- Gram (Desi Chana) 20 quintal in 2.5 Acre area



# In-House Cultivation

## Manure (Fertilizers)

- **With Rotten Leaves**
- **Vera Compost**



Photographed By Dr. Mahesh Kumar, mahesh.chahar@gmail.com

# Plants & Trees of Medicinal Importance

- Lemon
- Lemon Grass
- Amla
- Baheda
- Amaltas
- Harsngar
- Hibiscus
- Basil
- Tamrind
- Neem



## 28 Different Birds and Other Natural Snaps of Jaypee University of Engineering and Technology, Guna, Madhya Pradesh, INDIA

### Red-Vented Bulbul

*A red-vented bulbul perched on a tree branch.*



© Dr. Rajiv Tripathi

24.05.2012

It is a perky smoke brown-bird with partially crested black head, scale-like markings on breast and back, a conspicuous crimson patch below root of tail, and a white rump, the last particularly noticeable in flight. Both the sexes of this bird are alike. It is common in gardens and light scrub jungle, both near and away from human habitations. Large numbers collect to feed on banyan and peepal figs and winged termite swarms. This bird has no song as such, but its joyous notes and vivacious dispositions make it a welcome visitor to every garden.

## Indian Roller

*An Indian Roller on a lookout for insects, frogs or lizard on ground.*



© Dr. Rajiv Tripathi

**It is a striking Oxford-and-Cambridge-blue bird, with biggish head, heavy black bill, rufous-brown breast and pale blue abdomen and under tail. The dark and pale blue portions of the wings show up as brilliant bands in flight. Its sexes are alike. Usually it is found singly perched on telegraph wires etc, preferably in open cultivated country. From a lookout on a telegraph wire or other point nearby, it pounces upon some large insect, frog or lizard on the ground, returning with it either to the same perch or flying leisurely across to another nearby. Here the quarry is battered to death and swallowed. It is highly beneficial to agriculture as it destroys vast quantities of injurious insects.**



## Brown Rock Chat

*A Brown Rock Chat perched on a rusted drum.*



**It is plain brown above, rufous-brown below with darker wings and blackish tail. I have seen the rock chat singing away in solitary splendour around April-May, which may be their mating season. They can often be seen on prominent roof corners of buildings, and are well-known for their ability to mimic the songs of several species.**

## Common Babbler

*A Common Babbler or 'Turdoides striata'.*



© Dr. Rajiv Tripathi

**These light brown energetic birds have beady eyes that look perpetually angry. You see them everyday foraging noisily at the bottom of the hedge, flying off into the low branches, and occasionally harassing squirrels with repeated bomb-dives, with the squirrel scurrying into cover. Hindi legend has it that the babbler flocks are mostly females, which is why they are known as *sat bahin* (seven sisters). But perhaps that has more to do with how they are forever squabbling and fighting - wrestling pairs from a group will pin each other to the ground in a flurry of claw and feathers. You can hear them uttering a single intermittent "squaw" through the day, but often they make other calls as well.**

## **Cuckoo (Asian Koel)**

*A female Asian Koel on electric wire.*



**One can hear them calling melliflously in April May, but finding them is harder. Murphy's Law: They never call when you are looking at them. Proof: You are so focused on looking through the lens that you can't hear. Female Cuckoo: The cuckoo gene apparently carries a marker that specializes the female to lay eggs that match the host species that it parasitizes. So daughter cuckoos will also parasitize the same hosts. As many as 13 eggs have been found in a crow's nest.**

## Male Cuckoo



**It is only the male cuckoo who sings, the female is largely silent (lucky him!). These are found in the entire Indian union (Bangladesh, Pakistan, Sri Lanka and Myanmar). Usually it is silent in winter and hence often recorded as absent. It frequents gardens, groves and open country abounded in large leafy trees. It's flight is straight and swift with rapid wing beats.**

## **Black Drongo**

*A black-drongo settled on a tree.*



**These are glossy black birds with a long deeply forked tail. It is usually seen on telegraph wires, or attending on grazing cattle. From exposed look outs, it keeps a vigilant watch for grasshoppers and other insects. These are pounced upon and carried off, held under foot, torn to pieces and swallowed. It rides on the back of grazing cattle, and takes toll of the insects disturbed by animal's movement through grass. Forest fires or fired grass patches invariably attract large number of drongo's for the same reason. Highly beneficial for agriculture for the vast quantities of insects it destroys.**

## Hoopoe

*A hoopoe is commonly known as 'hudhud' in Hindi and Marathi. (clicked at ground between GH and Fountain).*



© Dr. Rajiv Tripathi

**It is a fawn coloured bird with black and white zebra markings on its back, wings and tail. It has a conspicuous fan-shaped crest and a long slender and gently curved bill. It is fond of lawns, garden and groves in and around villages and towns. Walks and runs with a quail-like but wadding gait, probing into soil for food with bill purely open like forceps. When digging, the crest is folded back and projects in a point behind the head. It is flicked open and erected fanwise from time to time. Its nest is notorious for its filthiness and stench, untidily lined with straw, rags and rubbish.**

## White-throated Kingfisher

*White-throated kingfisher striking its characteristic pose (clicked Behind ATS 2E-51, JUET).*



© Dr. Rajiv Tripathi

**It is a brilliant turquoise-blue kingfisher with deep chocolate-brown head, neck and underparts, a conspicuous white 'shirt front' and long, heavy, pointed red bill. I also observed a white wing-patch prominently in its flight. Its sexes are alike. This is one of the most common kingfishers as it is least dependent on water.**



© Dr. Rajiv Tripathi

**Usually it is seen in cultivated and wooded country, both near and away from water. I was surprised to find out that even its loud, frequently repeated cackling had an element of music in it!!**



## Red-Wattled Lapwing

*Red-Wattled lapwing is uncannily and ceaselessly vigilant and foremost to detect intrusion and raise an alarm. (clicked at main sports ground, JUET).*



**It is a large brown bird (somewhat larger than a pigeon) with a black head and neck, brown and white colour, with thin yellow legs. It is often seen near water, along with other water-birds actively digging out earthworms from the ground. It is a producer of well-known "Did-you, Did-you, Did-you do it?" call.**

## Brahminy Myna

*Both sexes of Brahminy Myna share domestic duties alike . . (clicked in front of academic block 2, JUET).*



© Dr. Rajiv Tripathi

**It is a typical myna, grey above and reddish fawn below, with the glossy black crown and long recumbent crest, and black wing quills. Young birds have crestless sooty brown head and dull general coloration. This species has been re-named "Brahminy Starling" at an international congress with no representation from India. Mynas love exploring holes, and this one in the gulmohar tree is a favourite. The Brahminy enters head first, disappearing completely, but manages to turn around inside the hole and re-emerge head first. Occasionally, it might have an insect too...**

## **Pied Myna (Asian Pied Starling)**

*Ablak or Ablaki Myna (Asian Pied Starling) has been extending westwards towards Pakistan in the recent years. . (clicked at main sports ground, JUET).*



**It is a trim black-and-white myna with orange orbital skin, with a deep orange-and-yellow bill. It parties and flocks about villages and cultivation. For them, the refuse dumps offer attractive feeding. It is commonly seen in attendance with grazing cattle, particularly on moist and marshy environs of village tanks.**

## Common Myna

*Common myna's are loyal to their partner for a lifetime. . (clicked at main sports ground boundry, JUET).*



© Dr. Rajiv Tripathi

**It is a familiar perky, well-groomed brown bird with bright yellow bill, legs and bare skin round eyes. It has a very large white patch, which is conspicuous in flight. It is a confirmed associate of man, following wherever he opens up new habitations. It is an omnivorous bird, eats fruits, insects and kitchen scraps. It follows the plough for earthworms and attends on grazing cattle for grasshoppers disturbed, side hopping jauntily, and springing up in the air to capture them. It has a variety of sharp calls and chatter: a loud, scolding *radio-radio-radio*, and *keek-keek-keek*, *kok-kok-kok*, *chur-chur* etc, uttered with plumage frowzled and ludicrous bobbing of head.**

## Rose-ringed Parakeet

*The tota or the parrot is often seen flying by noisily and fast. . (clicked near Jai Jyoti School).*



**It is a smaller edition of Alexandrine parakeet but lacking the maroon shoulder patches. Females lack the black and rose-pink collar of male. Often bands into large flocks and is highly destructive at all times to crops and orchard fruit, gnawing and wasting far more than it eats. It is a popular cage bird, as it mimics well and as it learns loading and firing of toy cannon.**

## Spotted Dove

*The nesting period of spotted dove is undefined, and is practically throughout the year.*



**White-spotted pinkish brown and grey upper-parts, and white-and-black 'chessboard' are leading clues to its identity. Both its sexes are alike. It is found in pairs or in parties, in open wooded country, gleaning on stubble fields, on cross country car tracks, etc. It becomes quite tame and confiding if unmolested, freely entering gardens and verandas of bungalows.**

## **Oriental Magpie-Robin**

*The size of Oriental Magpie-Robin is approximately equal to bulbul. . (clicked near Lake, JUET).*



**It is a trim black-and-white bird with cocked tail as in Indian Robin. Black portions of male are replaced by brown and slaty grey in female. It is found singly or in pairs, usually near human habitations. It is a shy, silent and unobtrusive bird especially during the non-breeding season, then skulking in shrubbery and only uttering plaintive swee-ee and harsh chur-r. Its song is punctuated by upward jerks of white-fringed tail.**

## Purple Sunbird

### Purple Sunbird – Female

*This tiny bird could be seen only because of its motion. This purple sunbird was sitting on crossing near main Gate.*



**Sunbirds and hummingbirds both have curved beaks and a hovering style of feeding, but they aren't related - these features are just an example of convergent evolution. The female is just like a male, when male is in its non-breeding plumage, brown to olive-brown above, pale dull yellow below-but with darker wings and a broad black stripe running down the middle of breast.**



**Purple Sunbird – Male**



© Dr. Rajiv Tripathi

**The breeding male is metallic dark-blue and purple, pectoral tufts bright yellow and scarlet. At a distance this bird looks all black. It usually eats insects and spiders, and very largely flower nectar. Its slender curved bill and tubular tongue are admirably adapted for probing into flower tubes and sucking the nectar, in doing so the bird helps to cross-pollinate the blossoms.**

## Indian Golden Oriole

*Indian Golden Oriole was long confused with Eurasian Golden Oriole, but the two species do not interbreed, and hence are different.*



© Dr. Rajiv Tripathi

**Very similar to the Eurasian golden oriole but has more yellow in the tail and has a paler shade of red in the iris and bill. The male has the black eye stripe extending behind the eye, a large carpal patch on the wing and wide yellow tips to the secondary's and tertiary's. Orioles feed on fruits, nectar and insects. They are capable of dispersing the seeds of many berry-bearing plants including the invasive Lantana camara. Their flight is dipping but strong and has been recorded to reach about 40 km/h. They sometimes bathe by repeatedly flying into a small pool of water. An individual ringed in Gujarat was recovered in Tajikistan more than nine years later.**

## Scarlet Minivet

*Scarlet Minivets show exclusively arboreal behaviour and have a pleasant whee-tweet call.*



© Dr. Rajiv Tripathi

**The adult male of scarlet minivet is glistening black and orange-red to deep scarlet while the female's and young males are olive-yellow above, yellow below with two yellow bars in the black wings. Flocks, in foliage canopy of trees. It flits restlessly among insects, and following one another from tree-top to tree-top. Its nest is a neat cup of rootlets and best fibres bound with cobwebs and bedecked with bark, moss and lichens. Both sexes of a scarlet minivet share parental duties.**

## Green Bee Eater

*A small bee-eater is partial to the zone above sandy beach along the seacoast.*



© Dr. Rajiv Tripathi

**It is a dainty grass-green bird tinged with reddish-brown on head and neck. Central pair of its tail feathers are prolonged into blunt pins. It has a slender, long and slightly curved bill. It also has a conspicuous black 'necklace'. It inhabits open country-the neighbourhood of cultivation, forest clearings, fallow land, gardens, golf links etc. It launches aerial sallies after bees, snapping them up in its bill and circling back gracefully on outstretched motionless wings to the perch, where the quarry is battered to death and swallowed.**

## Red-throated flycatcher

*Red-throated flycatcher is a winter visitor practically throughout India.*



© Dr. Rajiv Tripathi

**It is a plain brown flycatcher with partly cocked black-and-white tail and wings drooping on either side of it. In adult male chin, throat and breast are bright orange-chestnut, in female and young breast is ashy fulvous, while the under-parts are white. The white patches in the basal half of the black tail are diagnostic in flight, and also when tail is twitched up. It flits among branches of trees launching short twisting sallies to capture winged insects, descends to the ground momentarily to pick up crawling prey and flits back into an overhanging branch. From time to time, the cocked tail is twitched upright to the accompaniment of a sharp *click-click*. It has a pretty song of leaf warbler quality, but not heard in its winter quarters.**

## Indian Pond Heron

*Indian pond heron was sitting near girls hostel towards laundry.*



**This bird breeding in southern Iran and east to Pakistan, India, Burma, Bangladesh and Sri Lanka. They are widespread and common but can be easily missed when they stalk prey at the edge of small water-bodies or even when they roost close to human habitations. They are however distinctive when they take off with bright white wings flashing in contrast to the cryptic streaked olive and brown colours of the body. Their camouflage is so excellent that they can be approached closely before they take to flight, a behaviour which has resulted in folk names and beliefs that the birds are short-sighted or blind.**

## Wagtails

### Grey wagtail

*Grey wagtail sitting between Girls Hostel and Academic Blocks.*



**It is asprightly, slim long tail bird which is chiefly grey and yellow, usully found running around singly on ground near rocky streams. It chases tiny insects turning and twisting with agility in their pursuit and often springs up in to the air to cature the winged ones. The tail is incessantly and characteristically wagged up and down during this entire exercise and hence it gets its name Wagtail.**

## **White wagtail**

*White wagtail sitting near children play ground.*



The white wagtail (*Motacilla alba*) is a small passerine bird in the wagtail family Motacillidae, which also includes the pipits and longclaws. This species breeds in much of Europe and Asia and parts of north Africa. It is resident in the mildest parts of its range, but otherwise migrates to Africa. It has a toehold in Alaska as a scarce breeder. In the British Isles the darker sub-species the pied wagtail (*M. a. yarrellii*) predominates.



## Citrine Wagtail

Citrine wagtail sitting near Fountain.



The citrine wagtail or yellow-headed wagtail (*Motacilla citreola*) is a small song bird in the family Motacillidae. The term citrine refers to its yellowish colouration. This species breeds in north central Asia in wet meadows and tundra. It migrates in winter to south Asia, often to highland areas. Its range is expanding westwards, and it is a rare but increasing vagrant to Western Europe. Vagrants seem to extend the migration rather than straying en route; in Bhutan for example, though along one of the species' migration flyways, the citrine wagtail has been recorded as an extremely rare passer-by rather than staying even for a few days or weeks.

## Rock Pigeon

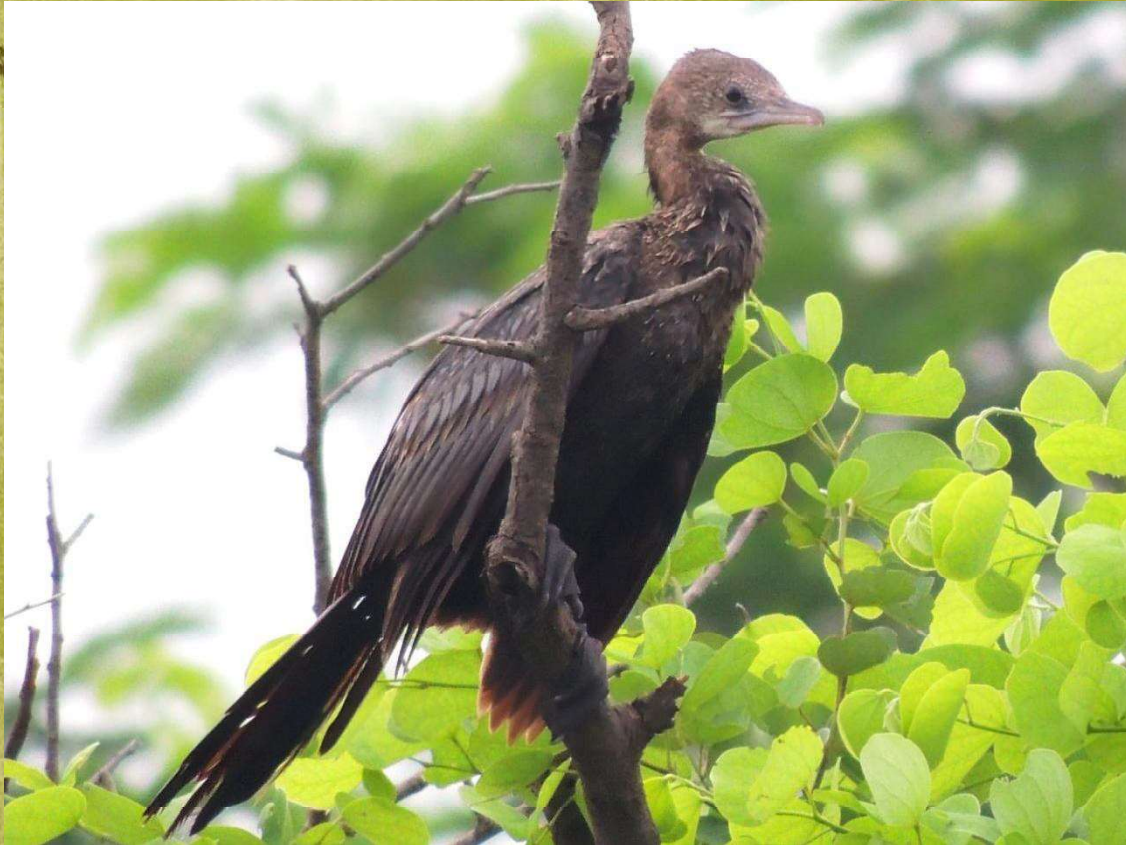
Sitting in front of Academic Block 3.



Rock pigeon is a member of the bird family Columbidae (doves and pigeons). In common usage, this bird is often simply referred to as the "pigeon". The species includes the domestic pigeon (including the fancy pigeon), and escaped domestic pigeons have given rise to feral populations around the world.

## Indian Cormorant

Sitting on inland lake tree.



The Indian cormorant or Indian shag (*Phalacrocorax fuscicollis*) is a member of the cormorant family. It is found mainly along the inland waters of the Indian Subcontinent but extending west to Sind and east to Thailand and Cambodia. It is a gregarious species that can be easily distinguished from the similar sized little cormorant by its blue eye, small head with a sloping forehead and a long narrow bill ending in a hooked tip.

## Rufous Treepie

**Sitting Near Children Playground.**

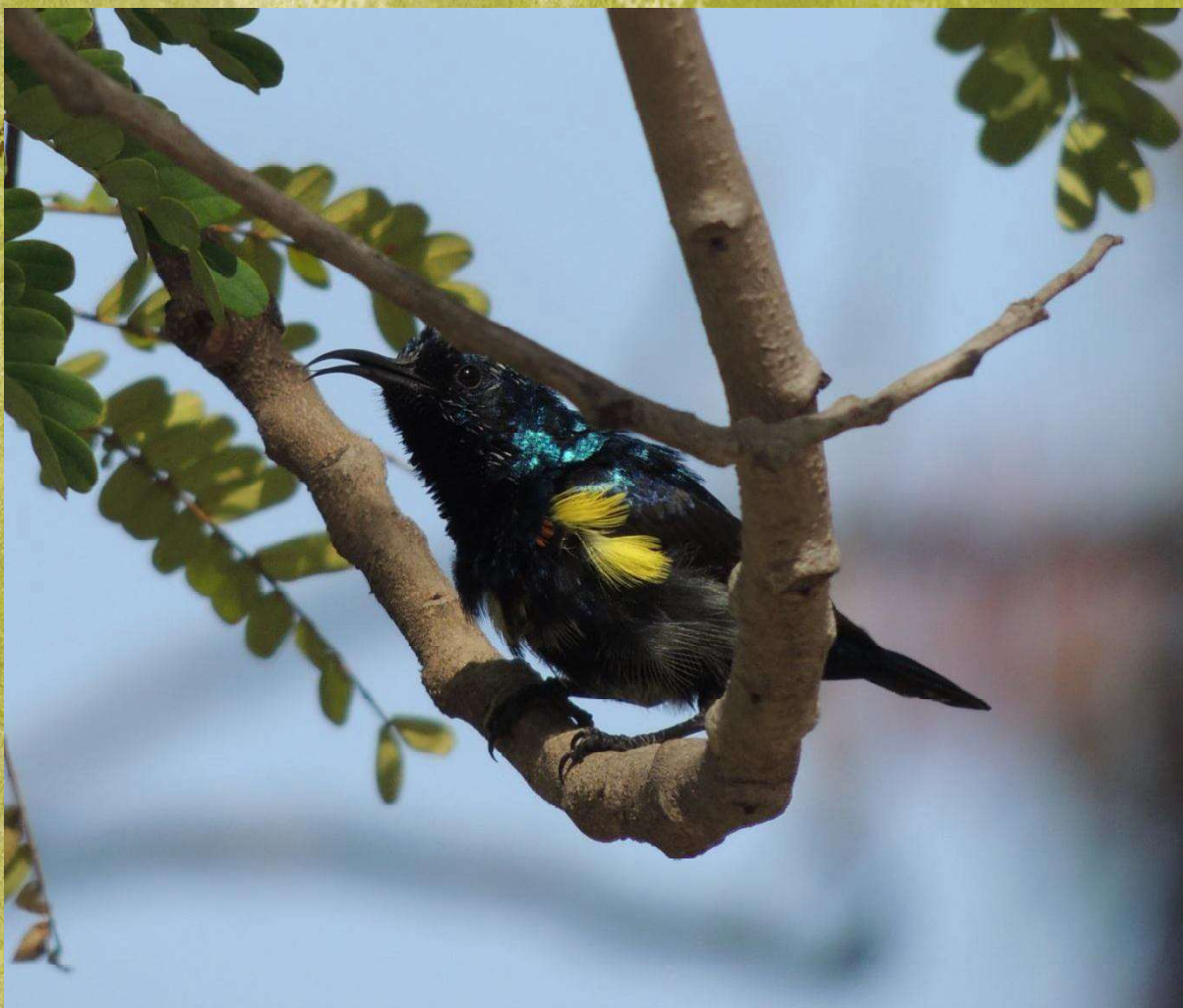


**The rufous treepie (*Dendrocitta vagabunda*) is a treepie, native to the Indian Subcontinent and adjoining parts of Southeast Asia. It is a member of the Corvidae (crow) family. It is long tailed and has loud musical calls making it very conspicuous. It is found commonly in open scrub, agricultural areas, forests as well as urban gardens. Like other corvids it is very adaptable, omnivorous and opportunistic in feeding.**

**Green Bee Eater**



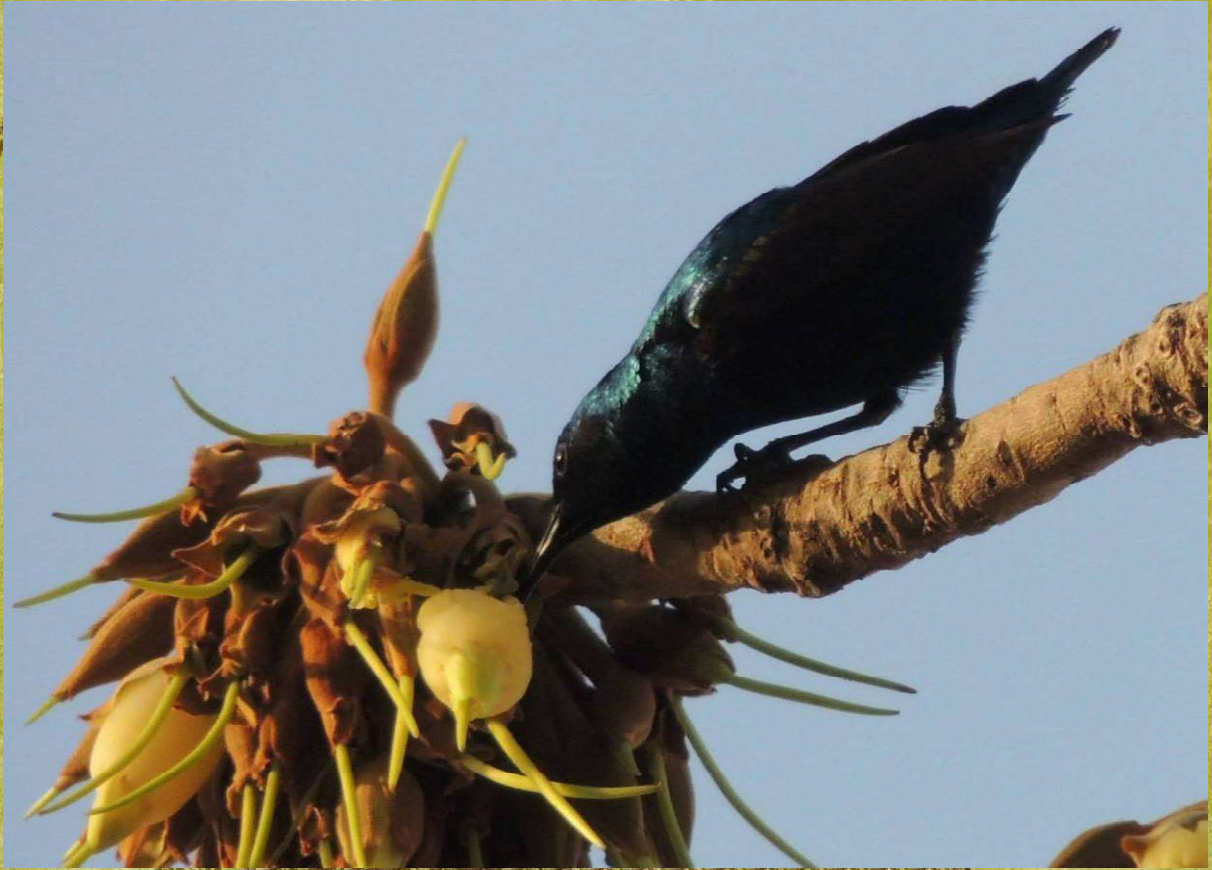
**Purple Sunbird Male**



**Grey Wagtail**



**Purple Sunbird Male**





**Red-Wattled Lapwing**



**Magpie Robin**



**Purple Sunbird Female**

**Sitting near the laundry.**





Try to leave the Earth a better place  
than when you arrived.

: Sidney Sheldon

Thank You Very Much!!

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