



NEW HORIZON PUBLIC SCHOOL

Nature Science Internship Program

September 13th 2017

OUR TEAM

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STUDY AREA

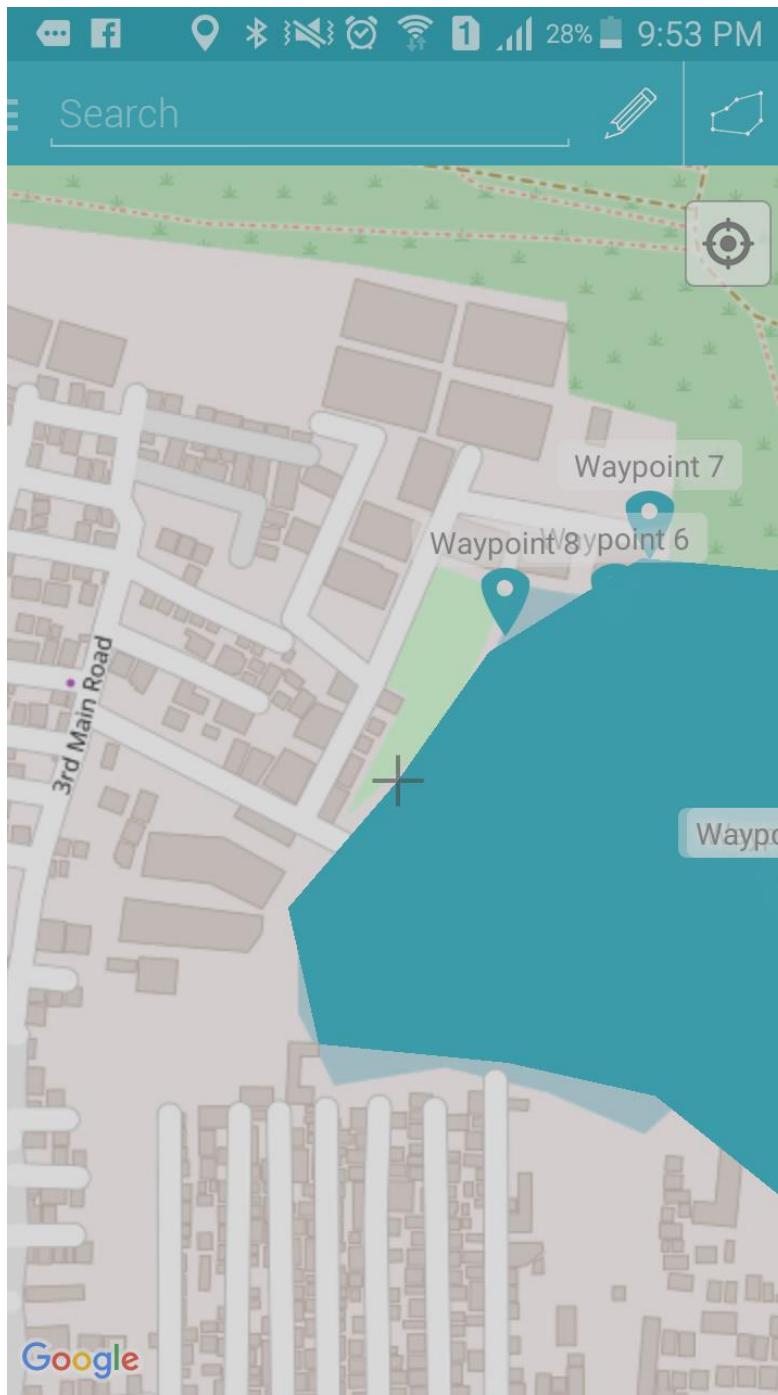
1. **KAGGADASPURA LAKE**
2. **UTTKARSH PARK NEAR
VIBUTHINAGAR/ L.B SHASTRI NAGAR LAKE**



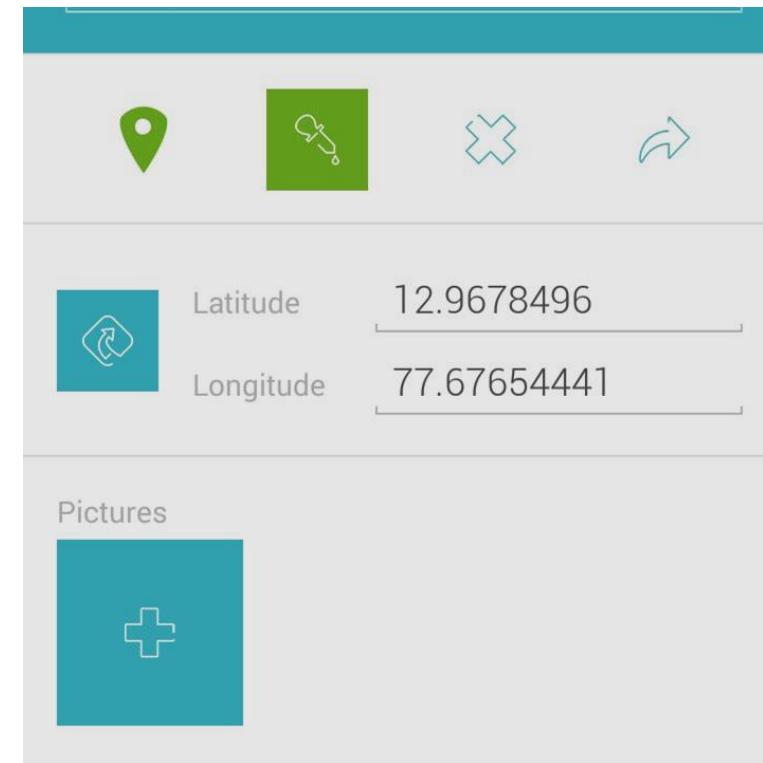


KAGGADASPURA LAKE

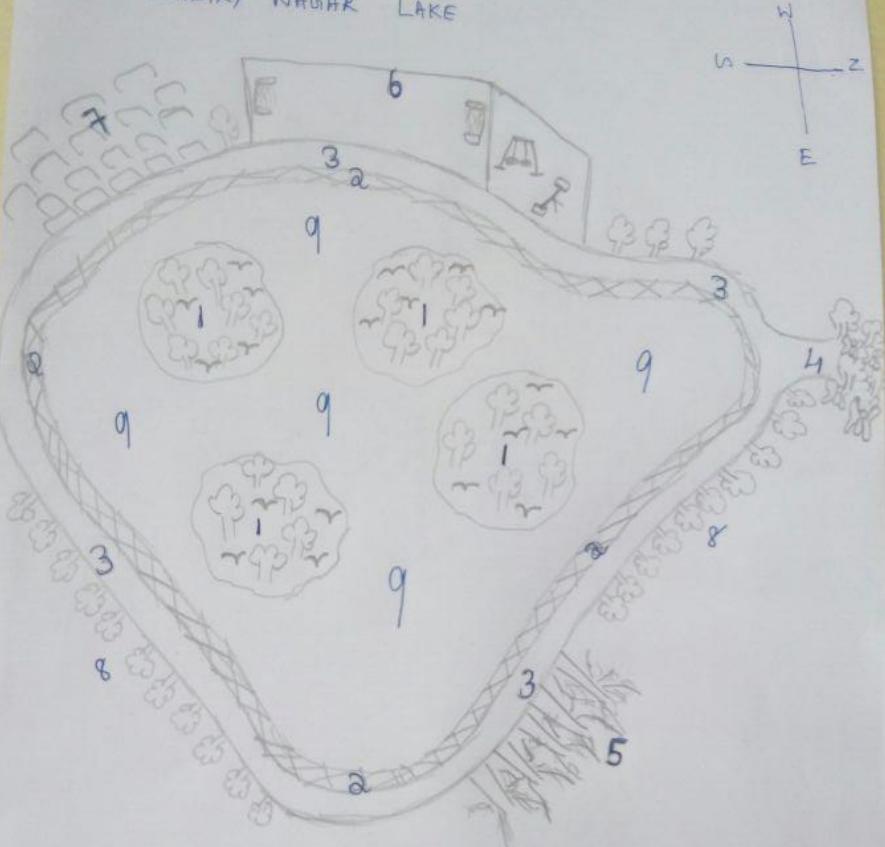
AREA-32 ACRES



UTTKARSH PARK



CRUDE STUDY MAP OF
L. B. SHASTRY NAGAR LAKE



1 = Islands with large variety of birds

2 = Fenced gate

3 = PATHWAY TO WALK

9 = WATER

4 = ENTRY TO BUTTERFLY PARK

5 = EUCALYPTUS GROVE

6 = PARK TO PLAY (UTKARSH PARK)

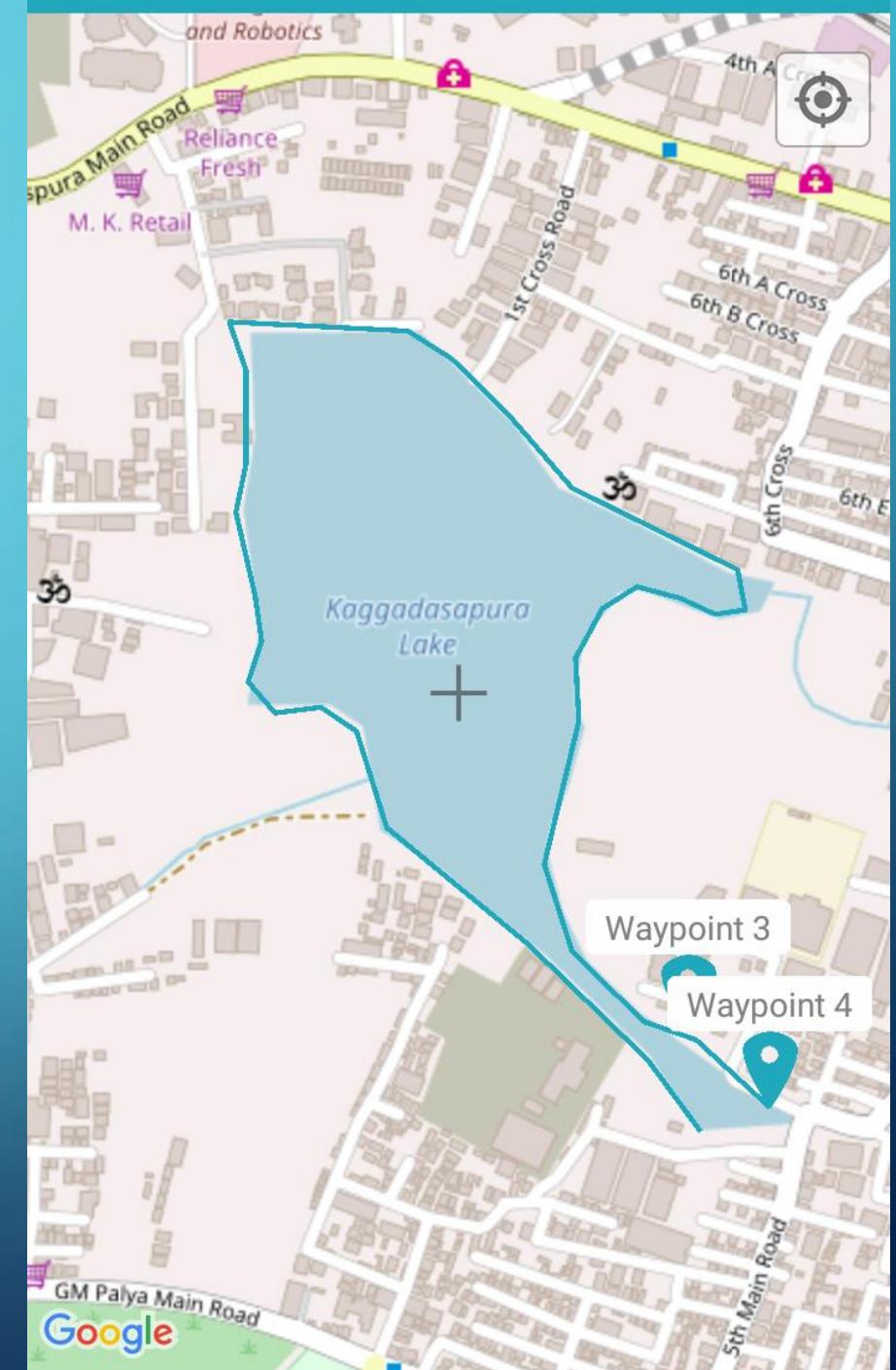
7 = SLUM AREA

8 = MIXED VARIETY OF TREES

HAND DRAWN MAP

WATER ANALYSIS

WATER FROM KAGGADASPURA
LAKE



WATER ANALYSIS :DISSOLVED OXYGEN

DATE OF TEST-AUGUST 26

INLET WATER:

- Amount of dissolved Oxygen : 4.0652 mg/ml
- Inference : heavily polluted
- pH- 7
- Temperature-24 ° C

OUTLET WATER:

- Amount of dissolved Oxygen : 5.3 mg/ml
- Inference : moderately polluted
- pH- 7
- Temperature-22 ° C

Water in the inlets is heavily polluted as sewage is pumped

In but in the outlets the water is being cleaned.



ON GOING CLEANING OF LAKE



MICRO-ORGANISMS IN THE WATER





SAVE THE LAKE.....NHPS AND KAGGADASPURA LAKE



SOIL ANALYSIS



UTKARSH PARK SOIL

LAT - 12.96824821

LONG - 77.67724648

the greens as he continued and missed the cut at the Northern Trust, the opening event on the PGA Tour, who has been having lots of fun on the green in Europe US, added a four-over 74 to round 75 and crashed out. Sri Lanka totalled nine-over 149 as well at two-over. On the 36 holes, Lahiri missed 12 dozen putts inside 12 feet, eight of them were right and some three of the missed cut. Lahiri is in the second Play-offs in Technologies and he will not go home until he stays on birdie and the Tour Championship for which only the Top 100 are invited. Dustin Johnson (65) and Fowler (66), Jordan (65) and Jhonattan Vegas (64) in a four-way share of the six-under. Johnson made a couple of mistakes, one up and one down, but looked like missing until his caddie encouraged him to try to get back to even par.

Kuchar ran off four straight birdies and kept right on rolling, ending his round at 64 with eight birdies on the last 10 holes. Kuchar and Russell Henley (72), who were the only players in the cut at 2-over, put themselves those missing the cut was Hideki Matsuyama, the 10. 1 seed going into the FedExCup Playoffs, who three-putted the last hole and missed by one. n

JORDAN SPIETH RIDES HOT PUTTER

Jordan Spieth caught fire on the greens as he seized a share of the halfway lead at the Northern Trust, the first tournament in the US PGA Tour's FedEx Cup playoffs. Spieth's seven birdies, in a row from the 10th, 14th - six in all on the five-under total of 65, led a group of four sharing that also included world number one Dustin Johnson, Venezuela's Jhonattan Vegas and Rickie Fowler. Vegas also posted a 65, nabbing five birdies without a bogey. Fowler carded a 66 and Johnson posted a one-under 69 on the Glen Oaks Club course in Valley Stream, New York. Johnson, whose opening round 65 put him one off the overnight lead, was three-under through 12 holes and eight-under for the tournament before errant tee shots led to back-to-back late bogeys. n

FIFA U-17 WC host city logo launched

Photo: AFP

On a two-strike lead over a trio of Americans - Mo Martin, Brittany Lincicome and first-round memories for me and a good experience," said world number one, Yani Tseng. "I think I'm ready to win." SPORTS EXCHANGE

just made the cut line at one-over 143.

Joshna wins her 15th Natl crown

Photo: AFP

Joshna Chinappa cruised to her 15th women's singles title while Saurav

NATIONAL SQUASH CHAMPIONSHIP

Photo: AFP

tournament was a little over ₹ 11 lakh

Chinappa and Gholam, the flagbearers of Indian squash for the last decade, were stretched in the final by Saurav Ravidran and Mahesh Manjunakar respectively before getting home in four games.

Making the occasion even more special was the fact that it was the start of the Trophy Experience in Guwahati and Sonowal also under the FIAU-17 World Cup Winner's Trophy Squash. "It is a big moment for us, especially for the young players. We are here to be a venue for the FIAU-17 World Cup..." n

Stalingrad History a constant reminder for 2018 WC workers

Photo: AFP

val easy shots. However, he should not be slumbering in the second round with some 100 hooks and straight drives to pace his rival quite closing three minutes perhaps tilted the scales in his favour. "This is my first senior level circuit and I turned out to be quite happy with the result," said Amit, whose biggest achievement so far has been the bronze medal he won earlier this year, said after his be

COMEBACK: RENAULT CAN'T HAVE ALL ANSWERS

Photo: AFP

The unanswered questions about Robert Kubica's Formula One comeback and may give him another run in their car before making

1943, in front of some of the city's few surviving inhabitants. The Soviet state has chosen it as a symbol of the people's resilience and grit. The effects of the war can still be

day for India at World Boxing Championships

Photo: AFP

As were off to a great start at the 19th Boxing Championships with an all-win with contrasting performances. S. S. Singh (49kg) and S. S. Singh (56kg), both debut at the mega event in late evening session. The former's coming into the earlier, bronze-medalist Amit took the ring and slowly start to edge out Mexico's Serra in a

split verdict.

The 21-year-old from Haryana, competing in the biggest tournament of his career, was rather sluggish in the opening round, allowing his rival easy shots. However, he should not be slumbering in the second round with some 100 hooks and straight drives to pace his rival quite closing three minutes perhaps tilted the scales in his favour. "This is my first senior level circuit and I turned out to be quite happy with the result," said Amit, whose biggest achievement so far has been the bronze medal he won earlier this year, said after his be

1943, in front of some of the city's few surviving inhabitants. The Soviet state has chosen it as a symbol of the people's resilience and grit. The effects of the war can still be

DETAILS

- Sample taken - 8th Sept Friday 6:03 pm
- Sample tested - 9th Sept Saturday 9:10 am
- Colour - Mild Brown
- Texture – Coarse ; Medium
- Particle size – 0.475 mm to 2 mm
- Weight – 75 g
- pH - 7

FIELD DENSITY

- Volume of sample - $\pi r^2 h = 257.27 \text{ cm}^3$
- Field Density = Mass of Sample ÷ Volume
 $= 75 \div 257.27 = 0.2915 \text{ g/cc}$

BULK DENSITY

- Mass of Dried Soil – 50 g
- Bulk Density – Mass of Dried Soil ÷ Volume
 $= 50 \div 257.27 = 0.1943 \text{ g/cc}$
- Water content : $75 - 50 = 25 \text{ g}$
- Water content % : $25 \div 75 \times 100 = 33.33\%$

BUTTERFLY AREA SOIL

LAT – 12.96824821

LONG – 77.67724648



DETAILS

- Sample taken - 8th Sept Friday 6:10 pm
- Sample tested - 9th Sept Saturday 9:22 am
- Colour – Dark Brown
- Texture – Fine ; Clay
- Particle size – <0.002mm
- Weight – 760 g
- pH - 7

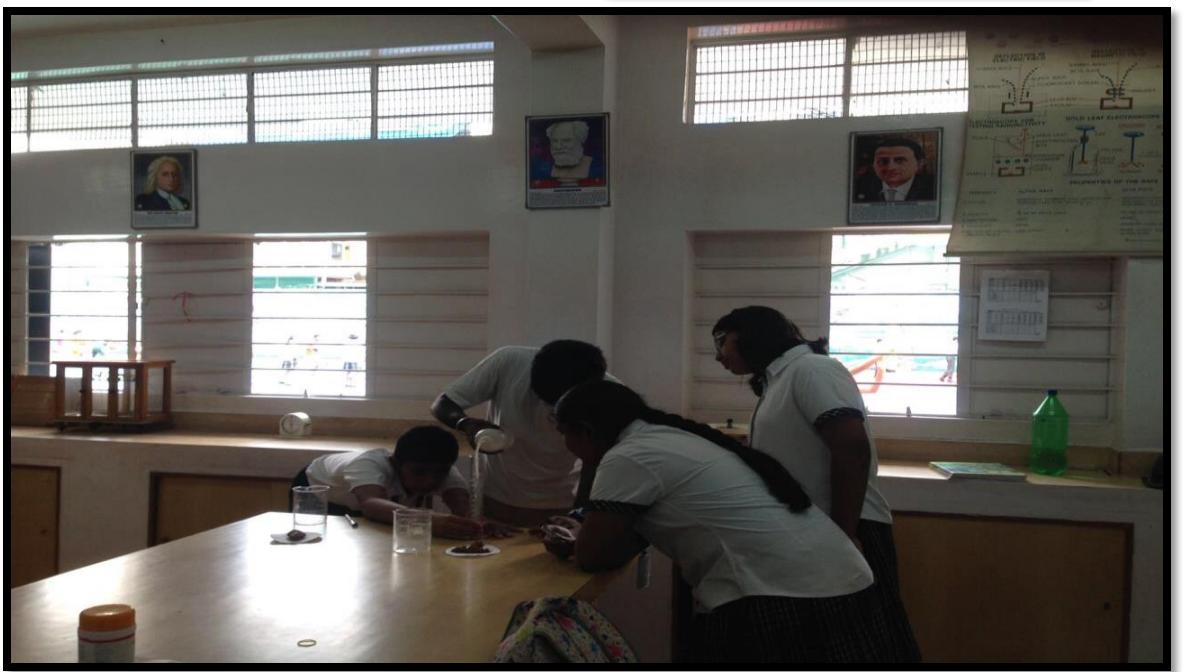
FIELD DENSITY

- Volume of sample = 257.27 cm³
- Field Density = Mass of Sample ÷ Volume
 $= 760 \div 257.27 = 2.95 \text{ g/cc}$



BULK DENSITY

- Weight of Dried Soil – 50 g
- Bulk Density = Mass of Dried Soil ÷ Volume
 $= 50 \div 257.27 = 0.1943 \text{ g/cc}$
- Water content : $760 - 50 = 710 \text{ g}$
- Water content % : $710 \div 760 \times 100 = 93.42\%$



BIODIVERSITY



Purple heron
Ardea purpurea
poliocephalus
Swampy marshy area
Sitting
Single
Slender bird with dark plumage, yellow
orangish red long legs
Lines on the side of face and neck



Purple swamp hen
Porphyrio porphyrio
Among weeds in damp areas
Sitting
Single
purplish hem like bird with
beak



Black drongo

Dicrurus macrocercus

In the midst of tall trees

Sitting

Glossy black plumage, forked tail, slightly
in the region below

Puffed up to protect from the cold and drizzle.

red vented bulbul

Pycnonotus cafer

Open forest area

Sitting

slight red mark

the tail.



White throated kingfisher
Halcyon smyrnensis
Near marshy wet areas on trees
trees
Sitting
Single
White throat brown body and blue wings
wings



Black kite
Milvus migrans
soar high in the sky or perch on tall
trees
Sitting
Single
short sharp beak and claws, narrow



Spotted dove
Spilopelia chinensis
Scarce vegetation like short grass and trees
Sitting
Pair
grey coloured bird with spots all over its body
below its eyes



White cheeked barbet
psilopogon virdis
on top of tall trees
Sitting
single
green bird with a white stripe

BUTTERFLIES



Common name : Blue
pansy

Scientific name :
Junonia orithya

Order : Lepidoptera
Class : Insecta



Common name : pale grass
blue

Scientific name: *Zizina*
labradus

Order : Lepidoptera



Common name : Angled
castor

Scientific name : *Ariadne*
ariadne

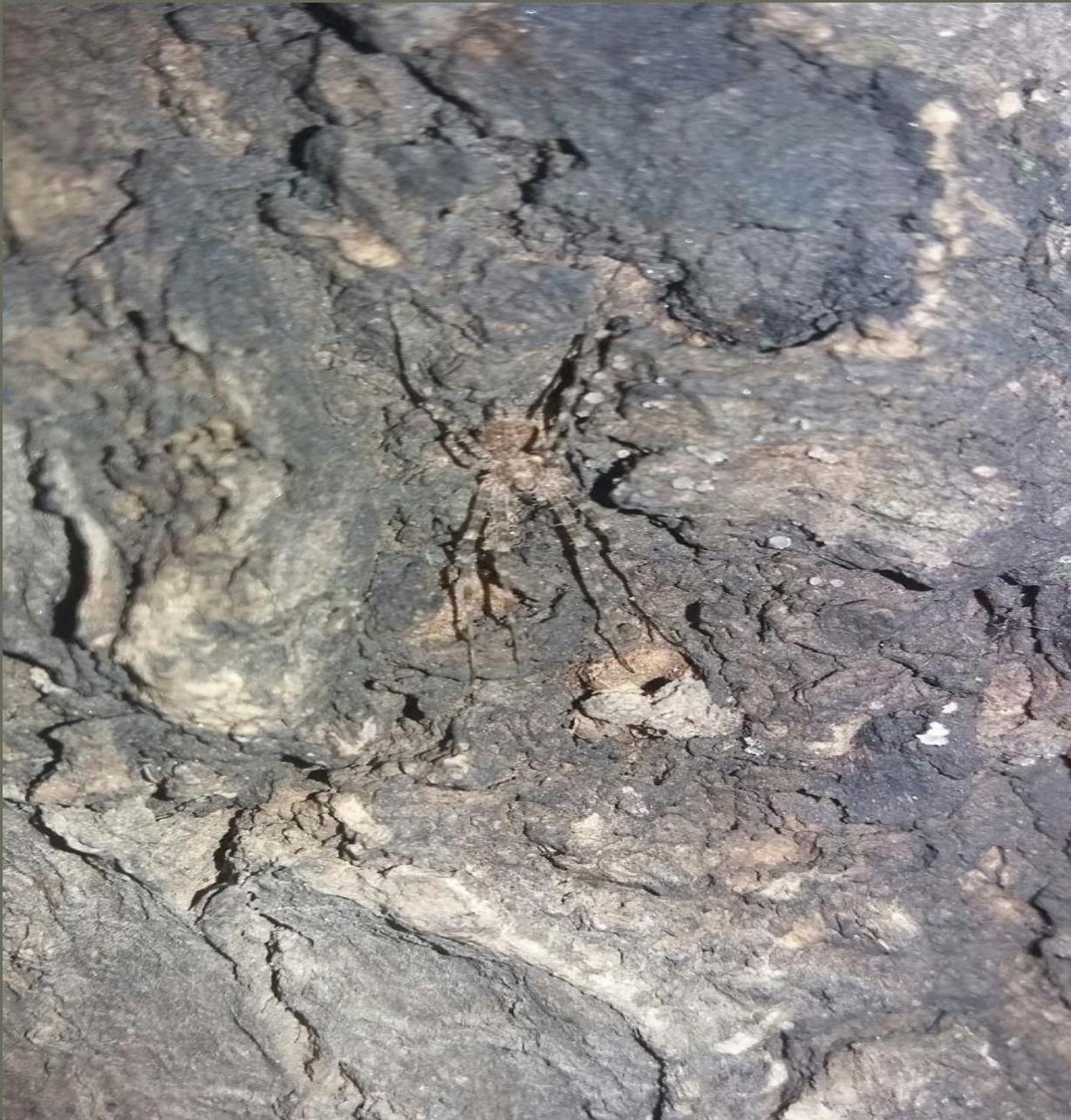


Common name : Common
indian crow

Scientific name : *Euploea*
core

Order : Lepidoptera





Common name :
Mostly – Grass spider
Scientific name –
family : *Agelenidae*
Order : *Araneae*
Class : *Arachnida*



Common name : Lappet moth
caterpillar





SOCIAL SPIDER

TREE STUDY



Honge Tree



Indian Fig Tree







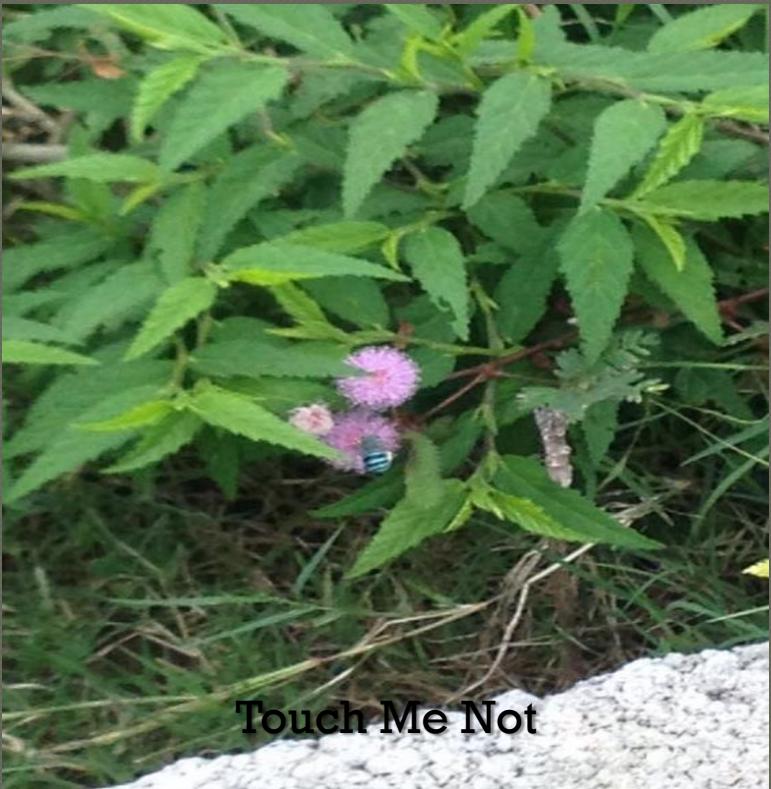
Malabar Nut



Hibiscus syrcus



Wild Water Lemon



FUTURE PLAN

- TO DOCUMENT THE GARBAGE DUMP POINTS IN OUR STUDY AREA.
- TO FIND OUT THE ENVIRONMENTAL LITERACY RATE IN OUR NEIGHBOURHOOD.
- TO DOCUMENT THE TYPES OF TEXTILES ,THEIR USAGE, THE KNOWLEGDE OF CLOTH FIBRE LIFE CYCLE AMONG PEOPLE.
- TO VISIT A LOOM.
- TO CONSOLIDATE CARBON FOOTPRINT AND FOOD MILE DATA.
- TO CONTINUE WITH SOIL AND WATER SAMPLING AND BIODIVERSITY STUDIES.

Thank
You!

