



Nature our Teacher

Resource Book for Middle School - Draft 2

Learning Expedition for Educators - 2019

Disha India Education Foundation



Contents

- 04 Preface and Authors**
- 06 The Gregarious Unnoticed
Bird of our Neighbourhood**
By Krunal Desai
- 10 Green Bee Eater**
By Shahnaz Begum
- 14 Common Moorhen
An Uncommon Thrill**
By Sonu Kumar
- 17 Sarus Crane**
By Abhishek
- 20 Little Cormorant
Black is Beautiful**
By Ashtam
- 22 Rose Ringed Parakeet
The Reserved Gentleman**
By Ashtam
- 26 पेंटेड स्ट्रोक (जंघिल)
तालाबी का सुनहरा गुलाबी पक्षी**
By Ajay
- 29 از: اسماء مبین
Cattle Egret (بگلا) خوبصورت پرندہ**
By Asma Mubeen
- 32 ग्रे हेरॉन (अंजन)
कुशल शिकारी**
By Durga
- 34 Acknowledgements**

Preface

••• Disha India Education Foundation in a first, held its Courage to Lead program with education partners associated with WIPRO. In another first, Disha India Education Foundation ran two parallel expeditions in this program, one in History and the other in Science.

The first module of the program which was held from 23rd to 28th September 2019 in Gurgaon culminated in this labour of love for the participants of the science expedition entitled 'Nature our Teacher'. This product is a memento from their journey and is designed to cater to the band of children in our Middle Schools.

The expedition was held in the Sultanpur National Park, a fascinating home to both migrant and resident birds. The broad beliefs that were kept as the main ideas of focus were that different species in nature are unique yet interdependent. They also realized through their expedition that the more biodiverse an ecosystem, the healthier and more sustainable it is. Focusing on birds in the sanctuary our participants saw how different birds live in, and adapt to their habitat. They also saw how the form of a particular feature in a bird enables its function and how function in turn determines the form of various features in a bird. They looked at beaks and claws in great detail and understood why beaks and claws were shaped and structured in different birds as adaptations to their habitats and their needs.

The journey was a very intense immersion, with participants looking very closely at their specific bird, following their every step for considerable periods of time. A task most challenging, as most birds do not sit still!!! But at the end of their time of focused research, each participant's bird was a lot more than just another bird.



The participants also experienced the value of craftsmanship where they made at least two drafts of both their work in writing and their drawings.

Nature has its own intelligence and its own strength, its own struggles and its own relevance. Being immersed in it by having to study just one bird in detail helped the participants connect with Nature's wonderful stillness and strength. It also made them realize as educators how essential it is to make opportunities for a real engagement which is probably the most important aspect of meaningful learning.

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The Gregarious Unnoticed Bird of our Neighbourhood

By Krunal Desai

••• From the stories I have heard in the past, I was so excited at the prospect of spotting the old Sarus Crane couple who have been living in Sultanpur Reserve for years.

After entering the park we were trying to hear different calls to locate birds but all we could hear was the harsh chattering of Jungle Babblers. One can easily identify them as they are seen everywhere in forests, around cultivations and in parks and gardens of our towns. In fact, they are categorised as LC (Least Concern) by IUCN (International Union for Conservation of Nature). Only out of annoyance and little curiosity to understand why they make so much noise, I started watching them and ended up observing them for almost 30 minutes.

Jungle Babblers are gregarious and social birds who stay together in sorrow and joy and rally to support

their clan members in difficulty by collectively attacking the assailant. Their continuous chattering (kē-kē-kē), squeaking and chirping is part of their complex communication system with the group.

They breed, throughout the year with the peak breeding season between March and September. The normal clutch has 3-4 deep greenish blue eggs. Both parents share equal responsibility of rearing their children. They build their nests around 4ft to 10ft above the ground in small trees or thick bushes. Like crows, jungle babblers also foster children of the Pied Crested Cuckoo and Common Hawk Cuckoo in their nests.

Before entering the park area, we had visited the Information Centre to understand different features of birds, especially their beaks and claws, and how they help them perform certain functions necessary for their survival. While observing Jungle Babblers, I also tried using the adaptation and form-function lens.



As we know bills of birds change with the evolution, particularly due to changes in feeding habits. Though the bill of a bird might be adapted for a certain type of food or feeding habitat, most birds are opportunistic feeders, seizing upon whatever food is readily available and can be handled with the bill. Jungle Babblers, being insectivorous, have a relatively straight, pointed bill with a wide gap and slight hook at the end. They feed mainly on insects but also eat grains, nectar and berries. I saw them feeding on the ground, moving along with long hops, searching among leaf litter and digging for food with their strong bill.

Their strong yellow legs are suitable for hopping. Like most passerine birds, their perching foot has four well developed and independent (free from one another) toes. The front three toes are partially and functionally free and the hind toe (hallux) joins the front toes at the same level and opposes them, so that the foot can grip a perch. They have moderately curved claws suitable to grip a variety of rounded or rough surfaces.

I also noticed that their short rounded wings and darkish grey-brown tails are suitable for their clumsy, short and weak flight. Their flight is nothing but continuous frantic flapping and gliding. And the tail supports their landing by flaring the feathers out.

I observed this almost untidy looking bird so closely for the first time and this experience helped me realize that how often, in life, we take things/people around us for granted and go in search of rare or distant things.

Glossary

1. Gregarious

Tending to form a group with others of the same species

2. Passerine

A passerine is a perching bird in the formal scientific order Passeriformes. The most prominent characteristic of passerine birds is their arrangement of toes. These birds have four toes: three facing forward and one backward, which allows the bird to easily cling to both horizontal and nearly vertical perches. The hind toe joins the leg at the same level as the front toes.

3. Camouflage

To exploit the natural surroundings to disguise something

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Green Bee Eater

Shahnaz Begum

••• Mostly distributed across sub Saharan Africa, the Nile valley, western Arabia and Asia, Green Bee Eaters are small, bright coloured, eye captivating birds. As the name suggests they feed mostly on bees but eat other insects too. It was a thrilling experience for me to see these birds sitting on a tree on an island at Sultanpur National Park.

Green Bee Eaters have a cylindrical body and may vary from 16-17 cm in length. These birds have a sharp and long beak, green coloured pointed feathers, clinging claws and a long tail. When these birds fluff their beautiful feathers and take flight, an orange shade is seen on the inner side of their wings. A black band around their eyes distinguishes them from other birds.

These birds are passerine and the claws are used to catch the twigs of trees and help in piercing. Their claws are dark in colour. They sit mostly at the

corners of trees so that it is much easier to spot food.

The beak of these lovely birds is beautifully elongated, pointed like an arrow, bright black in shade. Nature has created their beaks in such a way that they grab their prey with the beak when it comes near to them. Their beak is also used in digging their nest which is made in soil mounds. The birds are constantly cleaning their beaks by rubbing them against the branches.

Green Bee Eaters are swift flyers and take very sharp turns. Their pointed wings and tail help them in doing so. The common characteristic of these birds is that they keep changing their direction of flight. They do so to confuse their prey as well as save themselves from predators.

Green Bee Eaters are mainly birds of grassland habitat. The characters that make them different and unique from other birds is that they can survive in any habitat. They can find their prey in any habitat.



They are commonly seen along with other birds in Sultanpur National Park and share a mutual relationship with birds like Black Drongo, Pond Heron, Kingfisher, Cattle Egret etc.

Their birds are also called farmers' friend. They are natural pest killers and protect the crops. Their breeding season is from March to June. Soil mounds are the most selected spot for nesting and they lay 3-4 eggs at a time. The incubation time for these birds is 14 days.

Where can we find these birds... I found these birds at Sultanpur National Park..... I hope you can also visit it and see these beautiful birds...



Glossary

1. **Valley**
Low area of land between hills or mountains
2. **Captivating**
To attract and hold the attention or interest
3. **Feed**
Give food to
4. **Claws**
Curved pointed horny nails on each digit of the foot in birds
5. **Clinging**
To hold on tightly to somebody/ something
6. **Distinguishes**
Recognises something as different
7. **Thrilling**
Causing excitement and pleasure
8. **Passerine**
Feet of birds that are adapted for piercing

9. **Piercing**

Going through or into something

10. **Prey**

An animal that is hunted and killed by another for food

11. **Predator**

An animal that naturally preys on others

12. **Unique**

Being the only one of its kind

13. **Incubation**

The process of incubating eggs

Common Moorhen

An Uncommon Thrill

Sonu Kumar

••• सुल्तानपुर के राष्ट्रिय उद्यान में चहचहाती चिड़ियों के मधुर आवाज के बीच तालाब में पाए जाने वाला छोटा और भूरे रंग का सुंदर सा पक्षी है Common Moorhen जो अपने दिनचर्या का ज्यादातर समय खाने में बिताती है।

Common Moorhen नाम इसे 13वीं शताब्दी में मिला था जिसमें Moor का अर्थ होता है दलदल। इससे पहले इसे Common Waterhen भी कहा जाता था क्योंकि ये दिखने में मुर्गी की तरह है।

मूरहेन एक विशिष्ट प्रजाति है जो भूरे रंग की होती है कंधे पे हल्का सफ़ेद रंग होता है पैर पिले और ललाट पर लाल रंग लिए 30-38 सेमी का अति मनमोहक पक्षी है।

इसकी चोंच 3-4 से.मी. और हलकी नुकीली छोटी चिमटे के आकर का होती है जिसका इस्तेमाल ये पानी की सतह या हलके अंदर मौजूद छोटी वनस्पतियों को खाने के लिए करता है। ये अपने भोजन की तलाश में ज्यादा पानी के अंदर नहीं जाता है बार बार अपने गर्दन को पानी में डूबा के अपने चोंच का इस्तेमाल कर के

भोजन को पकड़ लेता है। ये अपने चोंच के बनावट का इस्तेमाल अपने नवजात बच्चों को भोजन करवाने के लिए करता है। ज्यादातर ये पानियों में उगे झाड़ियों के पास तैरता है क्योंकि ये अपने दिनचर्या का ज्यादा समय खाने में लगाता है। ये छोटे छोटे पत्तियां, वनस्पतियां (पटेरा और नरसल) और छोटे जलीय जीव को खाता है ये भोजन इसे सामान्यतः हर तालाब के किनारे में मिल जाती है।

ये अपना घोंसला जमीन से 2-8 फ़ीट की ऊंचाई पर बनाता है और ये कभी-कभी दूसरे पक्षी जो अपने घोंसले को छोड़ के जा चुकी होती है उसमें सुधार कर के उसका इस्तेमाल अपने लिए करती है। ये अपने चिमटे जैसे चोंच का इस्तेमाल घोंसले बनाने के लिए भी करता है।

इनके प्रजनन का समय फरवरी से जुलाई के महीनों में होता है। ये अपना घोंसला भी इसी समय बनाती है। ये एक बार में 7-8 अंडे तक देती है। जन्म से 40-50 दिनों में इसके बच्चे स्वतंत्र होकर अपने वादियों में विचरण करने लगते है।

ये शांत स्वभाव का साफ़ सुथरा रहने वाला पक्षी है जो अपने पतले गर्दन से अपने आप को



साफ़ रखता है, बिना किसी को नुकसान पहुंचाए अपने खाने की तलाश में गर्दन आगे की ओर हिलाता हुआ आगे बढ़ता रहता है।

इसके चलने में इसके पंजे की बनावट काफी मददगार साबित होती है। इसके पंजे में 3 ऊँगली आगे की तरफ एक ऊँगली पीछे की तरफ होती है जो इस पक्षी को विभिन्न संसाधनों को अपने परिवेश में इस्तेमाल करने में मदद करते है। ये अपने पंजे का इस्तेमाल कर के जमीन पर, पानी की सतह पर उगे बड़े पत्तियों जैसे कमल, सिंधारा, जलकुम्भी पर और तालाब के किनारे छोटे झाड़ियों पर चढ़ने में मदद करते है।

जब ये जमीन पर होता है तो बिल्कुल हवाई जहाज की तरह हल्का दौर लगाते हुए छोटी दूरी के लिए उड़ता है जिसमे इसके पंजे की बनावट मदगार होती है। सामान्यतः हर तालाब के किनारे पाए जाने वाले वनस्पति पटेरा और नरसल में अपने घोंसला बनाता है और खतरा महसूस होने पर इसमें छिप जाता है।

कुल मिलाकर ये पक्षी हमारे धरती पर पाए जाने वाले लाखों जीव में अपनी एक अलग सुंदरता और पहचान के साथ जैव विविधता को बनाये रखने में अहम् भूमिका निभाता है।



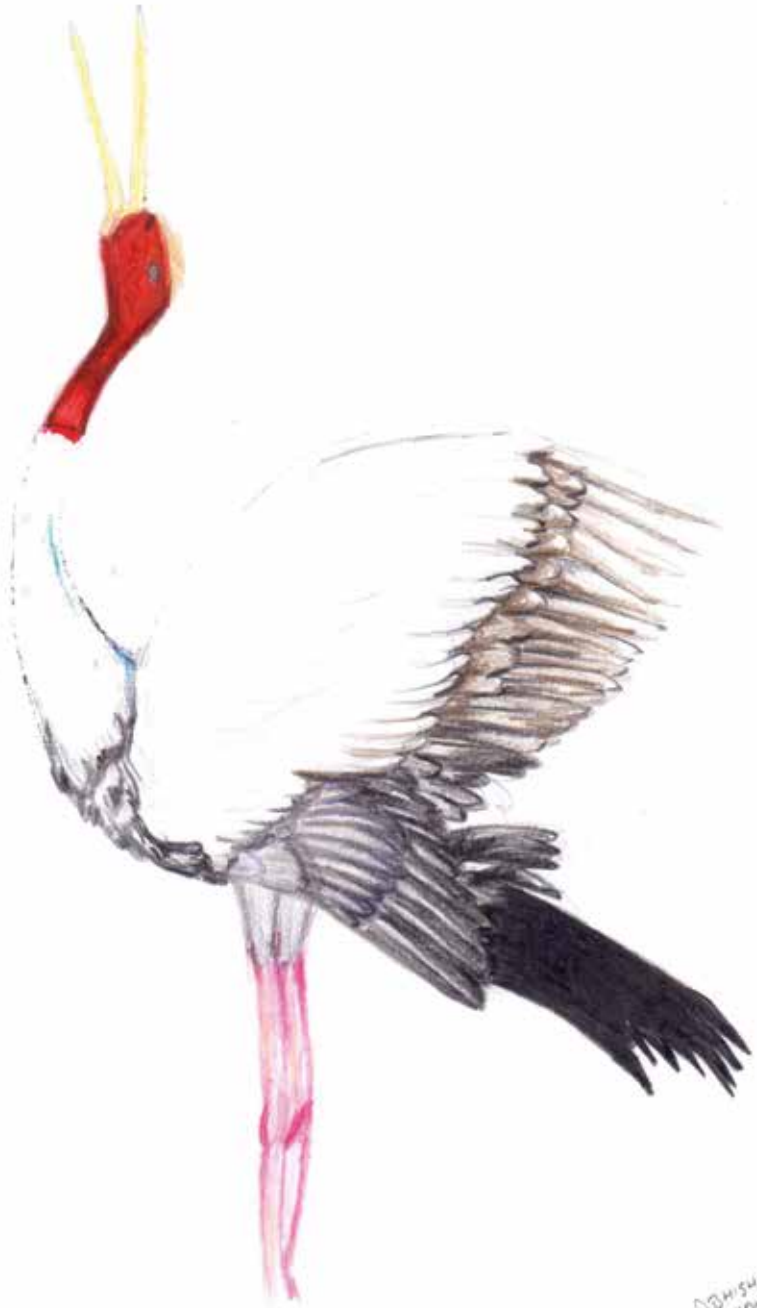
Sarus Crane

Abhishek

- • • The Sarus Crane is the tallest flying bird in the world and is admired for its grace and beauty. The Sarus Crane is a large non-migratory bird found in parts of the Indian Subcontinent, Southeast Asia and Australia. It is majorly found near wetlands but they are terrestrial birds and nest on ground mainly in grasslands.

It has a red head and a white flexible neck. There is a white patch on its forehead which looks like a crown attached to its beak. It has a streamlined grey colored body. It is a long legged and long necked bird.

Sarus Crane has a mud probing beak also known as 'bill'. The bill is a significant part of its body which is used for eating, feeding, probing, catching and preening. Its long beak works perfectly with the long neck allowing it to catch insects and fishes swiftly and deeper without making much movement or alerting its prey. They feed on a wide range of



ABHISHEK
CHANDHARI

wetland submerged vegetation like hydrilla and fishes, and on large insects and small vertebrates.

Sarus Cranes walk slowly and gracefully, almost majestically. Their long legs and flexible neck help them both in feeding and protecting themselves and their territory. When they need to intimidate any other bird or creature they stretch their body and neck to maximize their size. They accompany this stretching with loud calls and this works in keeping rivals out.

The long legs of Sarus Crane are made up of a strong protein called keratin. The legs are pale red in color and this attracts insects which are then caught very easily. They also allow them to go deeper in the wetland, deeper than other wetland birds like egrets or herons. The claws are passerine structured, three long fingers in front and a short thumb at the back; this gives them a grasp and a grip on ground as well as in the wetland. They also assist them in feeding as they hold their moving prey with the claws and eat with their bill.

The flying pattern is so eye catching; they use their long legs to jump and gain a certain height in order to flap their wings properly. They make repeated calls as an alarm for others to not come in their way. They fly with a straight neck, and legs trailing behind them.

They are commonly found in pairs; the female always follows the male and is guarded by it. Females are generally smaller than males. They breed during the wet season in their territory. They are considered as a farmer's friend and their presence indicates a better crop yield.

However, Sarus Cranes are threatened by habitat loss and are classified as vulnerable species.

Little Cormorant

Black is Beautiful

Akash

• • • Roosted up on a babul tree on a sunny day this steel-black shining bird looks stunning. This is Little Cormorant (Pandubbi). It is found in the Indian sub-continent.

Cylindrical in shape with a long flexible neck, this bird weighs around 360-500 grams with the dimensions of 50-60 cm. This bird lives both on tree tops and also in shallow or deep water. The uniqueness of this bird which is also described by its Hindi name (Pandubbi) is that it can swim under water for a long time. When under water the nostrils close and help the bird avoid water entering in its body.

What else makes this bird a unique species are its beaks and claws. A straight, sharp arrow like beak with a slight hook at the end gives no chance to its prey to escape. Once the prey is caught the hook helps in locking the beak. With its beak it can grab

and also tear the food. When feeding its young the cormorant uses its beak to tear the food into suitably small pieces.

Cormorants are so good at catching their prey, that one of its forms in China is trained and used for catching fish for commercial purposes.

Its claws are also one of a kind. They have feet that are part claws and part web. The partially webbed part is so flexible that it can fold its feet/claws. This helps it grasp stems and branches. It also is used to carry twigs for nesting.

Blessed with the capacity of feeding themselves in water and in air makes this bird a highly competitive species among those of the wet-land habitats.

The combination of its unique features and its dense black colour makes it an extremely graceful, efficient and elegant bird.



Rose Ringed Parakeet

The Reserved Gentleman

Ashtam

••• Following the teet-teet call at Sultanpur National Park, I ran from tree to tree, gazing at the canopies, with a thirst for the simple sight of this green emerald. I failed to spot it because hardly did I trace it in the dense foliage of the Neem or Gulmohar trees, than it flew to some other dense canopy. I wondered about how reserved and shy this bird is that it does not wish to show itself to visitors like me. I also realized then, how hard it must be for raptors to hunt this prey, the Rose Ringed Parakeet. It truly camouflages itself in the green leaves of its host trees. Thankfully, I was not as unlucky on the second day, when I traced it perching on a branch of a Neem tree..

You might be wondering what Parakeet is. The bird you have more often than not called as parrot, is actually the Rose Ringed Parakeet. It is a grass-

green, cylinder shaped, medium-sized bird found in the middle range of a tree's canopy (10-20 feet above the ground) in the deciduous forests of South Asia and Africa. It is a frugivore and is found on the trees of Guava, Jamun, Ber, Neem, etc. of wooded as well as cultivated areas.

A parakeet makes its nest in tree hollows. It carves hollows in trees left by Barbets or Woodpeckers or even in natural cavities of trees, and transforms them into its home. Its nest is an example of how different birds in the jungle, take care of each others' needs.

A dark red ring around its neck is the feature that has led to giving this bird its name. Along with this, it also has a black chin stripe. The combination of the red collar with the black chin stripe makes it look like a gentleman with a French beard.

It also has a long tail which is not a mere ornament but helps it in perching, navigation, and body balance.



Another feature which takes our attention to this bird is its red coloured beautiful yet interesting shaped beak. The upper mandible of the beak is inwardly twisted with a hook shape and gives it a resemblance to a beetle cutter. The beak acts as the bird's fifth limb. Not only does it help in peeling fruits or cutting nuts but also in movement over the branches. It also helps it to carve its nest out of tree hollows.

The parakeet has light brown passerine claws made especially for perching. Claws help it in performing functions like holding fruits, moving over branches and even hanging upside down from them, with the help of its beak. Beak and claws are also a tool for self-defence.

I was blest to observe a group of 6 to 7 parakeets, interacting and playing with each other, on my visit on the second day. Interestingly enough, they were engrossed in their 'musical chair game' in which they kept taking each other's left spaces. Along with that I observed a pair touching each other's beaks, almost like a kiss.

With a great awaited but interesting meeting, the parakeet finally left me feeling very grateful, filled with a wisdom of valuing simple things. The common parakeet which we see even in our neighbourhoods can be so very magically special.

Glossary

1. Raptors

A bird of prey like eagle or hawk

2. Frugivore

Fruit eating

3. Canopy

Branches and leaves, spread at the top of trees

4. Passerine Claw

The hind toe opposes the front toes

Notes:

Rose Ringed Parakeet is commonly known as Totaor Shuka in Hindi.

Sultanpur National Park is a national park, situated in Haryana, famous for different species of birds both resident and migratory.

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Published by Prakash Books

पेंटेड स्ट्रोक (जंघिल)

तालाबों का सुनहरा गुलाबी पक्षी

Ajay

••• जब हम किसी जैव विविधता की बात करते हैं उसमें पक्षियों की भागीदारी भी उतनी ही महत्वपूर्ण होती है, क्योंकि ये कहीं न कहीं पूरे परिस्थितिक तंत्र को सजीव बनाने में एक अहम भूमिका निभाते हैं।

पक्षियों की चहचहाट आस पास वातावरण को सजीव बनाती हैं, आज जब हर तरफ सिर्फ कंक्रीट के जंगल बनते जा रहे हैं, जिससे इनके प्राकृतिक आवास खत्म होते जा रहे हैं जिससे पक्षियों की प्रजाति भी खतम होने के कगार में पहुंच गई है। आज हमारा ये पक्षी भी विलुप्ति के कगार में पहुंच गया है।

यह सुलतानपुर और आस पास के तालाब (वेट लैंड)में पाया जाने वाला भारत का स्थानीय पक्षी है। ये सुनहरे सफ़ेद रंग का जिसके पैर लंबे तथा चोंच भी बड़े पीले रंग की होती है। ये तालाब के मुख्यत बबूल और विलायती कीकर के पेड़ों पर अपना घोंसला बना कर रहते हैं।

इनके पंख के उपर गुलाबी रंग होने के कारण अंग्रेजी पेंटेड स्ट्रोक नाम दिया गया है। जब यह पक्षी अपने पंख खोलता है तो ये पीठ से चोंच तक फैल जाते हैं। इनके छाती में काले रंग का एक विशेष

बैठ होती है, पंखों के नीचे काले रंग की पट्टी होती है जो उसके सफ़ेद रंग में एक पद्धति की तरह बनते है।

इस बड़े पक्षी में नीचे से घुमावदार टिप के साथ भारी पीले रंग की चोंच होती है जो इसे इसके भोजन खोजने और खाने में सहायता करती है ये मुख्यतः झील के सतह में अपना भोजन खोजते है, इनका मुख्य आहार मछली, घोंघा और जल में पाए जाने वाले छोटे जीव है। ये अपने चोंच को पानी के अंदर डाल कर एक कोने से दूसरे कोने तक घुमाकर मछलियों को स्पर्श करके अपना शिकार बनाते है। इनके चोंच इन्हे घोंसला बनाने में भी बहुत मदद करते है, ये छोटे छोटे लकड़ियों तिनको के टुकड़ों उठा पातीं है।

इनके पैर में आगे की ओर तीन अंगुलिया और पीछे की ओर एक अंगुली होती है, इनके पैर एक से दो फीट की होती है जिससे ये उतनी गहराई तक बिना डूबे जा पाते है, और जिससे ये एक पैर से भी अपनी पकड़ मजबूत बना लेते है और ये छुपी हुई मछलियों को अपना शिकार बनाने के लिए अपने पैरों से हलचल करते है जिससे मछलियां आसानी से पकड़ में आ जाती है।



इनके सहवास का समय अगस्त से अक्टूबर होता है। ये मुख्यतः झुंड में रहते हैं। और एक साथ अपना घोंसला बनाते हैं। ये बहुत कम आवाज लगाते हैं।

ये अपना गर्दन सीधे रखकर लंबी उड़ान भरते हैं ये काफ़ी ऊंचाई तक उड़ान भरते हैं। ये मुख्यतः पनडुब्बी, बगुले और अंधा बगुला के साथ अपना घोंसला बनाते हैं। इन सब के भोजन का मुख्यतः भिन्न भिन्न होते हैं जिससे इन्हे एक साथ रहने में दिक्कत नहीं होती है।

पक्षी मुख्यत

अपने विभिन्न रंगों से मन को मोह लेते हैं इसमें भी रंग जब चमकीला और गुलाबी सा हो और भी आकर्षक हो जाता है। यह तालाब के परिस्थितिक तंत्र को सुचारू रूप से चलाने में अहम भूमिका रखता है। अभी के बढ़ते पानी के अभाव और जल स्रोतों के खतम होने की अवस्था ये आसानी से देख पाते हैं कि अगर हम सब को जीवित रहना है तो जैंगिल जैसे पक्षी को हमारे पर्यावरण में बचे रहना कितना आवश्यक हैं।

از: اسماء مبین

(بگلا) Cattle Egret خوبصورت پرندہ

Asma Mubeen

سلطان پور نیشنل پارک جو کہ نئی دہلی میں ہے اس میں ایک بہت ہی خوبصورت پرندہ میری دلچسپی کا مرکز بنا۔ اس کا سفید رنگ پتلی لمبی لچکدار نازک گردن جس کی مدد سے وہ اپنے اطراف کی چیزوں کو آسانی سے دیکھ لیتا اور آنکھیں (Beak) ہے نوکیلی لمبی ہلکے پیلے رنگ کی چونچ ایسی خوبصورت جیسے قدرت نے آنکھوں میں کاجل لگایا ہو۔ یہ سب پرندے ایک گروہ میں تھوڑے تھوڑے فاصلے پر پانی کے قریبی گھاس پر اور درختوں پر کھڑے تھے جیسے آسمان میں تارے چمک رہے ہیں۔ ان کو دیکھ کر خوشی اور سکون محسوس ہو رہا تھا جانتے ہواس پرندے اور عام زبان میں Cattle Egret کو کیا کہتے ہیں اس کو بگلا کہتے ہیں۔

کیوں کہتے ہیں؟ اس کو Cattle Egret کیا آپ جانتے ہیں اس کو اس لئے کہتے ہیں کیونکہ یہ زیادہ گر گائے اور Cattle Egrete بھینسوں کے ساتھ ساتھ دکھائی دیتا ہے ایک مزے دار اور دلچسپ بات یہ ہے کہ میں نے اس کو نیل گائے کے اوپر کھڑے دیکھا اس کی وجہ یہ ہے کہ جب گائے اور بھینس گھاس کھاتے ہیں

تو گھاس پر بیٹھے حشرات اُڑتے ہیں اور ان کو نظر آجاتے ہیں اور یہ آسانی سے اپنی غذا کو شکار بنالیتے ہیں ان کی غذا حشرات، چھوٹی مچھلیاں، مینڈک، چمکی وغیرہ ہیں۔ یہ پرندہ آپ کو کھیتوں کے قریب، پانی کے قریب کیچڑ میں اور درختوں کے اوپر کھڑا نظر آئے گا یہ اتنے امن پسند پرندے ہیں کہ آپ کو لڑائی کرتے ہوئے بہت کم نظر آئیں گے۔

Cattle Egrete Black Crowed Night Heran 'Little Comorent' اپنے ساتھی پرندوں جیسے Grey Heron کے ساتھ اپنے گھونسلے بناتے ہیں تاکہ اپنے انڈے دشمنوں سے بچاسکے اور اگر کوئی دشمن آ بھی جائے تو ان کے ساتھی ان کو ہوشیار کر دیں گے جس سے یہ اپنے انڈے، بچے اور گھونسلوں کی حفاظت کر لیں گے۔ یہ گھونسلے بنانے میں سوکھی ٹہنی کے علاوہ ہری ہری ٹہنی بھی استعمال کرتے ہیں تاکہ اپنے گھونسلے کو خوبصورتی سے بنا سکیں۔ یہ پرندے کرتے ہیں اور 4-5 انڈے دیتے ہیں چونکہ جولائی Breeding مارچ سے جولائی کے درمیان اپنی میں برسات شروع ہو جاتی ہے اور اس موسم میں حشرات 'مینڈک اور مچھلیوں کی تعداد میں اضافہ ہوتا ہے اور ان کو غذا کی کمی نہیں ہوگی۔ ویسے تو یہ سفید رنگ کے ہوتے ہیں کے سر گردن اور پروں پر سنہری پر آجاتے ہیں اور (Male) کے موسم میں Breeding مگر کا رنگ سفید ہی رہتا ہے۔ (Female) مادہ

بیچھے سے چھٹی ہو کر آگے کی جانب پتلی اور نوکیلی ہوتی ہے جو ان Beak ان کی چونچ کو اپنے شکار کرنے میں مدد کرتی ہے جیسا کہ جب یہ پرندہ کھیتوں میں ہوگا تو حشرات کو اور کیچڑ میں Shallow Water آسانی سے اپنا شکار بنالے گا اور جب تھوڑے سے پانی والی جگہ ہوگا تو کیچڑ میں پھنسی مچھلیوں کو اپنی لمبی نوکیلی چونچ سے ڈھونڈ لے گا۔ یہ اپنی لمبی گردن اور لمبی چونچ سے اپنے جسم کی صفائی بھی کر لیتے۔ اس سے یہ پتہ چلتا ہے کہ یہ اپنے آپ کو کھیتے ہیں ان کو گھاس والی جگہ، پانی Pasarian صاف رکھتے ہیں۔ ان کے پیلے لمبے پیر جس کو میں، درختوں کی ٹہنیوں کو پکڑنے اور کیچڑ والی جگہ پر چلنے میں مدد کرتے ہیں۔ ان کے پیر ان کے جسم کی لمبائی کے برابر ہوتے ہیں۔ ان کے پروں کی لمبائی تقریباً 56-46 سنٹی میٹر ہوتی ہے۔

کا دوست بھی کھیتے ہیں کیونکہ جب فصل اُگائی جاتی ہے تو Farmers اس پرندے کو کسانوں کر دیتے ہیں یہ پرندے (Destroy) بہت سارے حشرات 'کیڑے وغیرہ آکر اس فصل کو برباد کا کام Pesticides ان حشرات اور کیڑوں کو اپنی غذا بنالیتے ہیں۔ اس طرح یہ حشرات کش دوا کرتے ہیں۔ قدرت نے یہ بہت ہی دلچسپ پرندہ بنایا ہے جو قدرت کے نظام کو چلانے میں مدد کر رہا ہے۔ اس کو دیکھ کر دلی سکون اور خوشی محسوس ہوتی ہے اس کا سفید رنگ

ہم کو امن کا پیغام دیتا ہے جب ہم اس پرندے کا بغور مشاہدہ کریں تو یہ سوچنے پر مجبور ہو جاتے ہیں کہ ہم انسان آج کی بھاگ دوڑ والی زندگی میں سب کچھ تباہ کرنے میں لگے ہیں ان جیسے پرندے خاموشی سے قدرت کے نظام کو چلانے میں اپنا اہم کردار ادا کر رہے ہیں۔

معنی (Meanings)

گروہ	گروپ
ٹہنی	درخت کی شاخ
ہوشیار	خبردار
تباہ	ختم
پیغام	سبق



ग्रे हेरॉन (अंजन)

कुशल शिकारी

Durga

••• हाथों में जब दूरबीन पकड़ के सुल्तानपुर के पक्षियों को देखने का मौका पहली बार मिला तो मैंने कई पक्षियों को देखा। (जैसे – बगुला, पेंटेड-स्ट्रोक, सारस इत्यादि...)

इन पक्षियों में से एक पक्षी था “ग्रे-हेरॉन” जिसके बारे में मुझे हर जानकारी हासिल करनी थी। इसलिए मैं पूरी तरह तैयार थी, उसके खोज के लिए।

जब मैं पानी वाले इलाके के तरफ पहुँची तो दूर से मेरी नजर ‘ग्रे-हेरॉन’ पे पड़ी। वह पानी के किनारे एक पेड़ के छाँव में बैठी थी। वह मेरे से काफी दूरी पर थी। इसलिए मैंने झटपट अपनी दूरबीन निकाली और उसे ध्यान से देखने की कोशिश करने लगी।

सबसे पहले मेरा ध्यान उसके शरीर के रंगों पे पड़ा। इसके शरीर का अधिकतर भाग ‘राख के रंग जैसा था’। तभी मैंने अनुमान लगाया कि शायद इसलिए इसका नाम ‘ग्रे-हेरॉन’ है। इसके शरीर के बाँकी हिस्सों पे काले रंग के धब्बे थे – जैसे माथे के ऊपर काले रंग के धब्बे की उपस्थिति और पंखों के ऊपरी सतह के किनारों पे भी काले रंग की मौजूदगी। इसके गर्दन को देखे तो ये बगुले के गर्दन से लम्बी होती है, लगभग 80-100 से.मी. जैसी।

लेकिन गर्दन का आकार बगुले जैसा ही है जो की अंग्रेजी के 's' अक्षर की तरह दिखता है। ऐसा इसलिए क्योंकि वो अपनी गर्दन को असानी से झुकाकर पानी के अन्दर ले जा सके और मछलियों या अन्य पानी के जीव-जंतु को भोजन के रूप में पकड़ सके। इसके गर्दन के अलावा इसकी चोंच की भी बनावट इसे अपना भोजन (पानी में रहने वाली जीव-जंतु - जैसे मछलियाँ या अन्य कीड़े) हासिल करने में काफी मदद करती है क्योंकि इनकी चोंच काफी लम्बी और आगे के हिस्से नुकीली होती है।

इसके पैर भी लम्बे से होते हैं। ताकि ये जब पानी में चले तो वह ज्यादा अन्दर तक ना डूबे और ये असानी से थोड़े पानी वाली जगहों पे चल सके। इनके पंजो में चार उँगलियाँ होती हैं। तीन आगे की तरफ और एक पीछे की तरफ। ऐसी पंजो की बनावट इसकी इसलिए है ताकि ये दलदली स्थानों पर चल सके। साथ ही साथ यह अपने पंजो में तिनके, छोटी-छोटी लकड़ियाँ को अपने पंजो में फंसा कर एक जगह से दूसरे जगह ले जा सके ताकि यह अपना घोंसला बना सके।

एक रोचक बात जो इसके बारे में मुझे देखने को मिली वह यह थी की यह एक स्थान पर काफी लम्बे समय तक एक पैर पर खड़ी थी। वह इस तरह इसलिए खड़ी होती है ताकि वह बिना हलचल किये, एक ही हमले में अपने शिकार को पकड़ ले।

इस तरह के व्यवहार को देखकर और इस चिड़ियाँ के बारे में जानकारी पढ़कर मैं एक वाक्य जो इसके बारे में बोल सकती हूँ वह यह की “ये कुदरत की ऐसी बनावट है जो शांत स्वभाव के साथ-साथ एक कुशल शिकारी भी है।”



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