

KEOLADEO NATIONAL PARK

A WORLD HERITAGE SITE NATURAL

PREFACE



Keoladeo National Park

Bharatpur, Rajasthan
India

A World Heritage Site
Natural



United Nations
Educational, Scientific and
Cultural Organization



World
Heritage
Convention

PREFACE

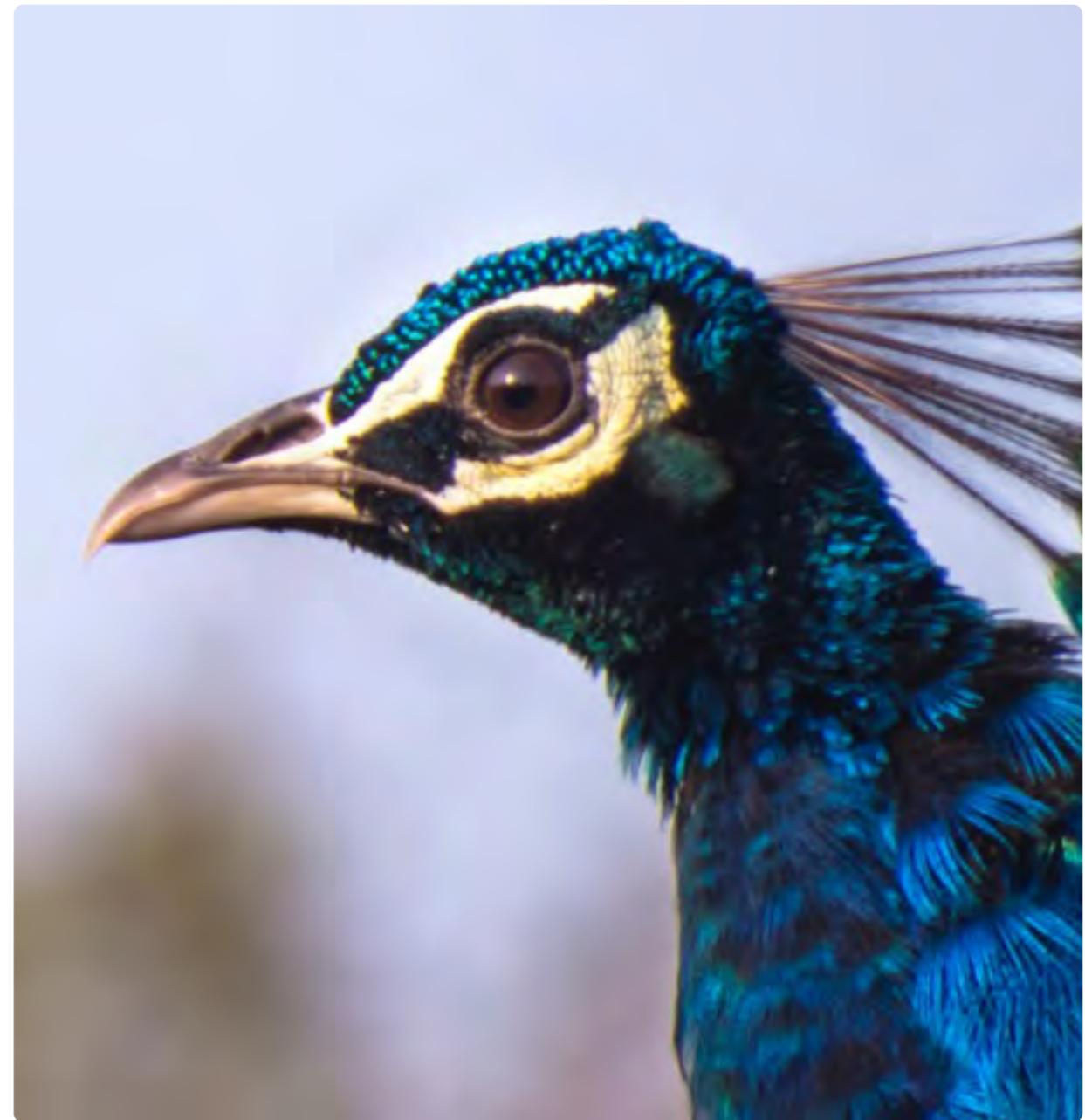
UNESCO defines the movement to preserve the cultural and natural heritage sites as "our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage is both irreplaceable sources of life and inspiration. What makes the concept of World Heritage exceptional is its universal application. World Heritage sites belong to all the people of the world, irrespective of the territory on which they are located."

The above thoughts shared by UNESCO are today emerging as one of the key guiding principles world over in preserving natural places like Keoladeo National Park.

Due to the protected status these places have been able to withstand the onslaught of deforestation combined with unplanned development, but the droughts and lack of water supply may undo much of the good work done till now. Above that we have the new threat of Climate Change, which may further deepen the droughts and may cause disturbance in the complex fauna and flora relationships.

The park has been upgrading its infrastructure for serving visitors and that has provided economic benefits to communities living around it. Their involvement and appreciation is important for the long term survival of the park.

This book has been prepared to help the reader appreciate, the unique outstanding universal value of this bird park. An extensive



appendix is given of fauna and flora with links to Wikipedia so that if online the reader can delve deeper into his research.

TABLE OF CONTENTS

Chapter 1: Nanda Devi National Park & Valley of Flowers National Park

1. [Introduction to the park](#)
2. [A brief History of the park](#)
3. [Migratory Birds](#)
4. [Resident Birds](#)
5. [Endangered Birds](#)
6. [Important Animals in the park](#)
7. [Important Trees in the park](#)
8. [Environmental Threats to the park](#)
9. [Community around park](#)
10. [Visiting the park](#)

Chapter 2: Appendix

11. [List of Birds at the park](#)
12. [Animals and Trees list](#)
13. [Acknowledgements](#)

A photograph of two Sarus Cranes in a natural habitat. One crane is in the foreground, facing right, with its long neck arched and its red wattle and comb prominently displayed. Its wings are partially spread, showing dark feathers. The second crane is positioned behind it, also facing right, with its neck arched and its red wattle visible. They are standing on a patch of dry, brownish ground with some sparse green grass in the background.

KEOLADEO NATIONAL PARK

SECTION 1

INTRODUCTION TO THE PARK



Keoladeo National Park (KNP), popularly known amongst bird watchers as Bharatpur, is an anomaly and an exception. It should not have existed, yet it is very much there, like a shinning emerald. The purpose of its creation is exactly opposite to the reasons for its existence today. Its history is akin to a popular work of fiction, or a Hollywood flick, with twist and turns, tragedies and triumphs. It is a place which had to have a UNESCO World Heritage Site status by the sheer weight of the journey it has made.

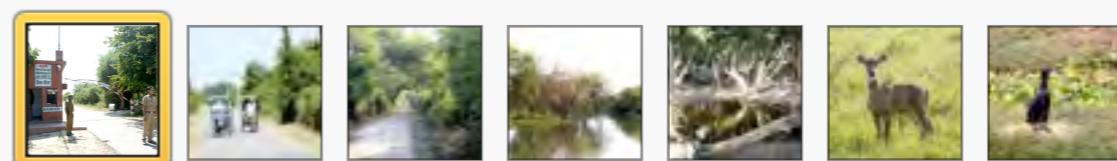
Here is what makes this National Park and a World Heritage Site a truly rare phenomena. Keoladeo National Park, which boasts of a total of 400 plus bird species, in addition to a healthy number of mammal, reptile and insect species, owes its origins to the work of human hand. And it is this continued human intervention that is still largely responsible for its existence even today. It is the only national park in India that is protected and demarcated by a man made rubble masonry boundary stone wall all around. The park is not only a manmade natural wonder and a home for birds and

animals, but plays an important role in improving the social and economic fabric of the region.

Since its inception, Royal families, British Sahibs and Memsaibs and their long retinue used to visit the place. Today it draws in their hundreds, bird watchers, tourists, nature lovers and ornithologists. In the year 2012-2013, according to the park records, a total of 144503 individuals visited the park. The number for the year 2013-2014 was a little higher at 146907. Out of these a healthy 45399 (2012-13) and 42071 (2013-14) were made up by students. Over the years the site has also had to deal with its share of problems and challenges. Some have been overcome and many still remain. The good part is that the forest department and local administration has been making a renewed effort for the all round improvement of the park.



The guards at the gate ensure no vehicle or people with arms enter the park.





Map of the Keoladeo National Park
Source: Rajasthan Forest Department



Please click if you are online to access the google map.

SECTION 2

A BRIEF HISTORY OF THE PARK



The Keoladeo National Park, gets its name from an ancient Shiva temple that is located in the middle of the park. The god Shiva known here as Keoladeo, was and is revered by the local population and the Bharatpur royalty. So when the park was given a National Park status by the Indian Union Government, naming the park after the presiding deity in the park was considered most appropriate. The park is also known as Keoladeo Ghana, where Ghana, having a literal translation as “dense” stands for an area having ‘dense tree cover’. Something the locals identified the place as.

In the late 19th century the king of Bharatpur, a princely state sharing its border with Delhi and Agra, saw a collection of wild fowl roosting at a water filled depression of land near his fort. Till then it was an arid scrub woodland and the rain water fed depression dried up in the summer days.

A duck shooting enthusiast, he quickly saw the potential of the place as his personal duck shooting range. What followed was diversion of the waters of Banganga and Gambhir, two seasonal rivers to create rich water body. Then the British, who were major

duck shooting lovers came and what followed, was an elaborate plan and its quick execution. The plan involving creation of a combination of sluice gates, canals, dams and dykes. The aim was to get more water to the depression and expand it. What the king had not anticipated in this shallow marshland, was that he had got the main nerve of the virtual highway of the migratory bird route. Soon his marshland, which was extended to 27 square kilometers, started receiving a prodigious amount of resident and migratory bird population. By 1901 a system was well in place which enabled the reserve to be full of water throughout the year. Today the humans not only control the access and quantity of the water going into the KNP but also the levels the water attains in different parts of the park. The complex system of dykes and sluice gates is used to keep different levels of water in different parts of the park. This important aspect, where water depths are carefully regulated, ensures a rich biodiversity with the park flora and fauna finding



This ancient temple located in the heart of the park is dedicated to lord Shiva (Keoladeo).



water levels conducive to their tastes and liking.

The history of the KNP is etched in stone next to the Keoladeo temple. One can see the play of human ingenuity, resourcefulness and vision in the written text.

The stone text points that in 1763 Ajan Bund was created by Maharaj Suraj Mal , the then ruler of the princely state of Bharatpur. By the end of 1899 the present area of natural depression inside the park was converted to a protected deer shooting site.

The artificially created duck shooting reserve was officially inaugurated in December, 2, 1902 by the then Viceroy of India, Lord Curzon, when a duck shoot was inaugurated in his honour.

The duck shooting exploits from 1902 to 1938 of the elite of the society are again etched in a row of stone panels a little ahead of the Keoladeo temple. The list has three entries where more than 4000 birds were shot in a single day, the last being the most deadly where 4273 birds were shot by a party led by Viceroy Lord Linlithgow on November 12, 1938. There are further three more occasions where more than 3000 birds were shot in a single day. These are disturbing figures for any bird lover. But then, when one reads them, and after which when the eye catches the rich bird life playing behind the stone panel, one instantly feels why it is all so important to be saved. Thankfully those wild duck shooting days have been pushed to the books of history and the only shooting you are allowed here today is with your cameras.

Kailash Sankhla, a young forest officer posted at Bharatpur in the early 1950s, who later went on to become the first director of Project

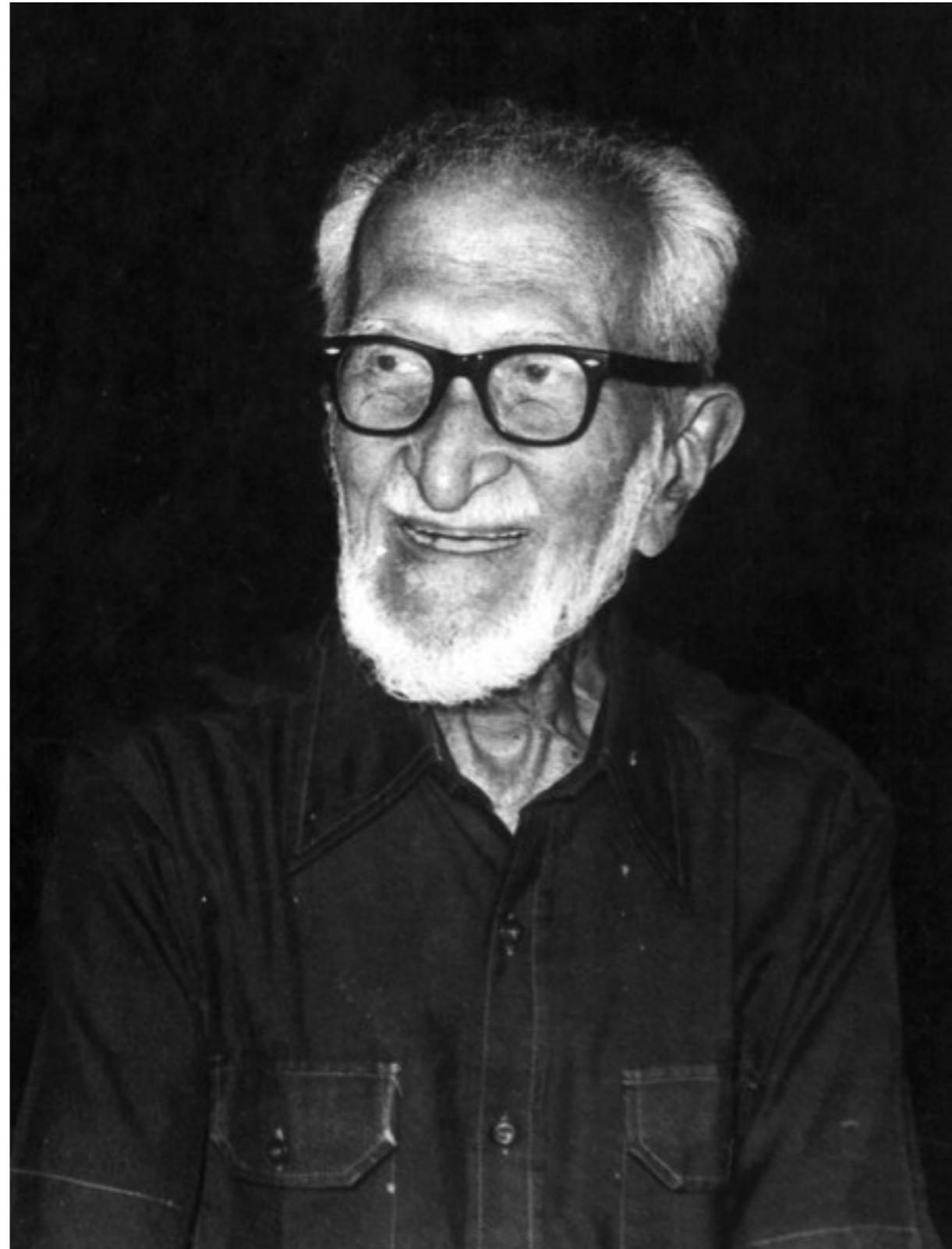
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14 TH DEC			
1907	1 ST SHOOT HON'BLE M ^E .COLVIN A.G.G.	1750	32
15 TH NOV			
1908	1 ST SHOOT HON'BLE COL.PINNEY A.G.G.	2141	33
30 TH NOV			
1908	2 ND SHOOT	1085	27
12 TH NOV			
1909	1 ST SHOOT HON'BLE M ^E .COLVIN A.G.G.	3297	48
27 TH NOV			
1909	2 ND SHOOT	501	20
24 TH DEC			
1910	3 RD SHOOT	664	24
4 TH JAN			
1910	1 ST SHOOT H.H.MAHARAJA BIKANER	2758	51
1 ST DEC			
1910	2 ND SHOOT H.L.H.THE CROWN PRINCE	1379	49
31 ST DEC	OF GERMANY		
1911	3 RD SHOOT H.H.MAHARAJ RANA OF	1712	42
13 TH FEB	DHOLPUR		
1911	H.H.MAHARAJA BIKANER	1285	48
8 TH NOV	H.H.MAHARAJ RANA OF DHOLPUR		
1911	2 ND SHOOT H.H.MAHARAJAS 1 ST SHOOT	1022	29
30 TH DEC			
1912	3 RD SHOOT H.H.MAHARAJA KISHENCARH	1439	41
20 TH JAN			
1912	4 TH SHOOT HON'BLE MR.R.E.HOLLAND	1317	27
15 TH FEB			
1912	1 ST SHOOT MAHARAJ RANA DHOLPUR	716	16
7 TH NOV			
1912	2 ND SHOOT H.E.VICEROY LORD HARDING	8511	51
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Tiger, is credited with being instrumental in getting the protection to the Bharatpur swamps. In fact it was Kailash Sankhla, who drafted the first notification declaring the area a bird sanctuary in 1956. But it was not until the year 1981 that the Bird Sanctuary was bestowed the status of a National Park. As the fame and visitors to the park, both avian and humans increased, the UNESCO saw the world wide importance of the site and exalted it to the status of World Heritage Site in 1985.

Another big name associated with KNP is the person known as the grand old bird man of India. Dr. Salim Moizuddin Abdul Ali, as the head of Bombay Natural Heritage Society (BNHS) did a great job in studying its bird and saving the Bharatpur marshlands.

Over the years some famous names have visited, worked or have been associated with the KNP.

Celebrated film maker Sir David Attenborough shot a documentary "Trials of Life" for British Broadcasting Corporation at the KNP. Peter Jackson, a famous wild life expert spent many years working here. Belinda Wright and Stanley Breeden, documented the bird sanctuary on a film between 1979-80.



Dr. Salim Ali

SECTION 3

MIGRATORY BIRDS



The most spectacular time in Bharatpur is the time when it is visited by the migratory birds. It is this migratory bird season which makes Bharatpur what it is today, a truly deserving World Heritage Site. The migratory bird season starts with October and continues throughout the Northern Indian winter months and culminates by the end of February.

The park lies on the migration fly path of a huge variety of avian population escaping from the harsh northern winters. These birds make a longish stay at Bharatpur before continuing their journey to

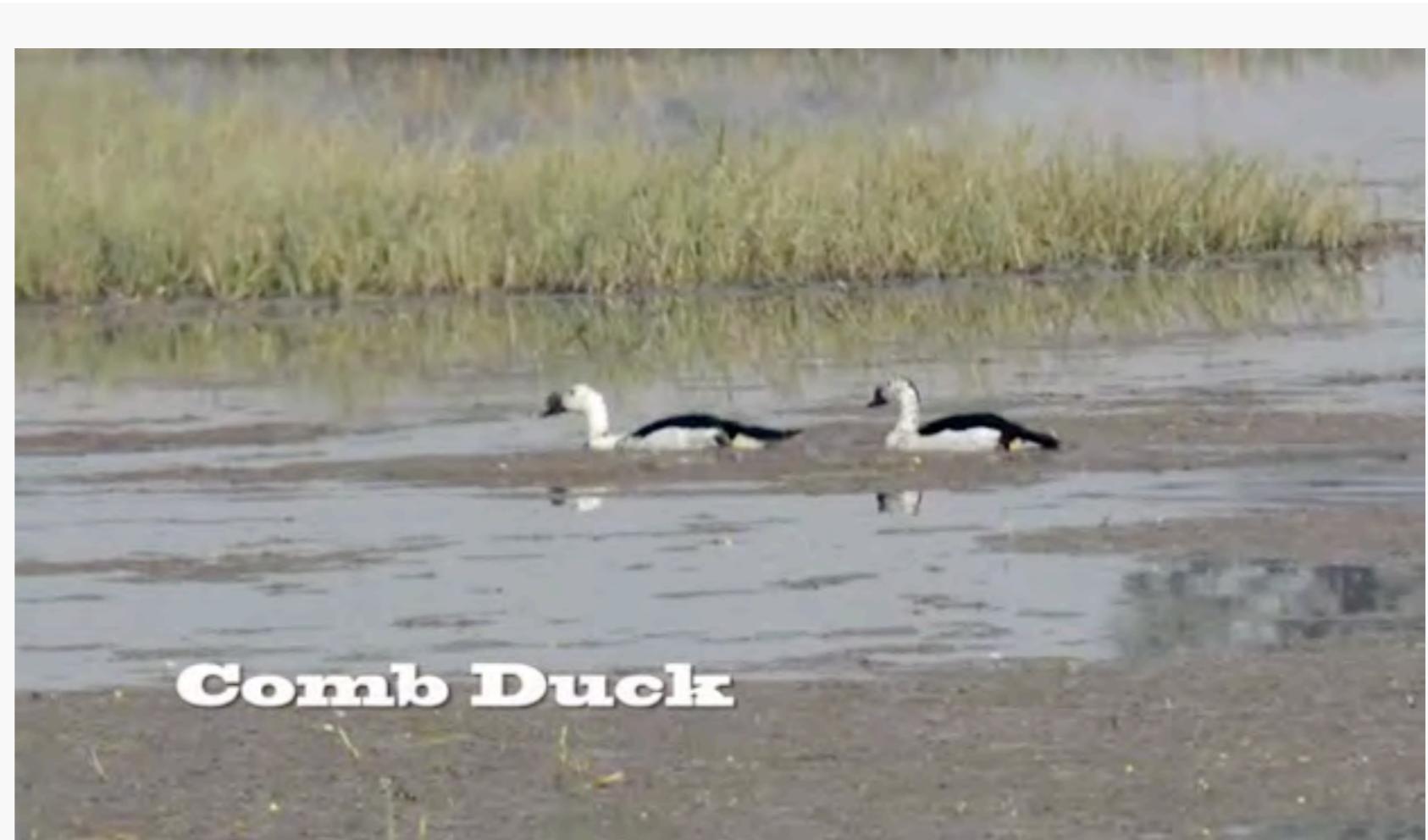
the warmer climate down south. It is this unbeatable location right on the migratory bird highway that makes KNP what it is.

The first arrivals of the migratory birds start with October. This is by the time the resident birds have already gone through their nesting season. Flocks of water birds such as ducks, pochards, teals and terns start arriving. The arrivals include Gadwall, Eurasian Wigeon, Northern Shoveler, Garganey, Marbled Duck, Tufted Duck, Northern Pintail, Red-Crested Pochard, Common Pochard and Ferruginous (White-Eyed) Pochard follow each other into the

marshlands. Greylag Geese and Bar-Headed Geese also make their noisy entry into the scene in large numbers. A programme of ringing of birds at KNP to know their fly paths and winter homes revealed that some ringed birds such as Garganey, Common Teal and Wigion were recovered 4,600 kms away in Russia.

The waders such as Plover, Sandpiper and Snipe, though enter more quietly. Though not in huge flocks, but unmistakable in their regal presence are the birds of prey known among bird lovers as 'raptors.' As many as 32 species of raptors and seven of owls (such as Dusky Eagle Owl and Brown Fish Owl) have been recorded in the park. For spotting the owls you would need the help of your bird guides as the owls are known to be partial to particular trees in the park. The bird guides or even rickshaw pullers at the park know these favorite owl haunts.

The list of migrant raptors includes Marsh Harriers, Steppe Eagle, Osprey, Peregrine Falcon, Greater Spotted Eagle and Imperial Eagle. For the winter months these visiting raptors share the marshlands with resident raptor population of Tawny Eagle, the



Comb Duck

Ducks and migratory birds enjoying the winter sun.

majestic looking Crested Serpent Eagle, Black Winged Kites and Brahminy Kites among others.

Besides other smaller birds which have their preference for trees, grasslands and bushes, are also winter migrant visitors such as Warblers, Wagtails, Buntings and Pipits.

Among the larger migratory birds are the Demoiselle Cranes, Black-Necked Storks, Woolly-Necked Storks and Common Cranes.



Black Necked Stork is tall nearly 1.5 m, solitary and silent. Has a long sharp blade like beak.



SECTION 4

RESIDENT BIRDS



The migratory birds make their entry only during the winter months. But all through the year, the 75 strong resident bird species hold the stage at KNP.

The standout feature of the park, are the heronries, it supports. Post monsoon months present a true spectacle when different varieties of water birds can be seen perched on trees with their young ones in tow. The good part is that in KNP a lot of these noisy and action packed heronries are located next to the roads and can easily be observed by visitors. A typical herony on a Babul Tree

(Acacia Nilotica) would have up to nine different varieties of birds such as Ibis, Asian Openbills, Eurasian Spoonbills and Painted Storks among others.

One of the first photographic opportunity you are likely to get here is of the Darter, popularly known as snake bird, basking on a tree stump jutting out of the calm water. You are also likely to chance upon as your rickshaw paddles towards the Keoladeo Temple, in the middle of the park, the colorful Coppersmith Barbet, an Indian Grey Hornbill, a few Green or Blue Tailed Bee Eaters and the

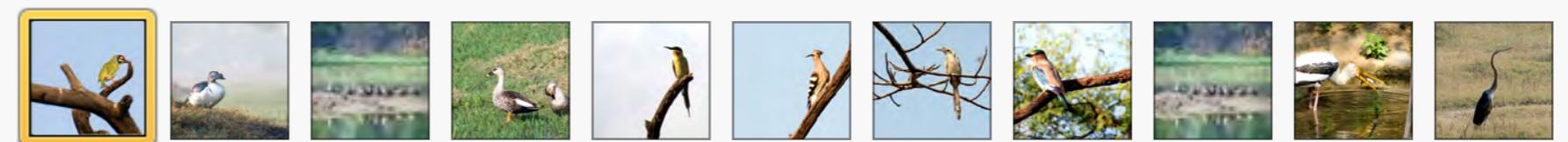
Black Ramped Flameback Woodpecker. All of these are residents of KNP.

On the other spectrum of visibility are the Nightjars, which are not only reclusive during the day time but are also so well camouflaged that you are likely to miss them for a part of a moss covered tree branch. Here you would need the help of a trained bird guide. But once spotted these Nightjars seldom move and present one with ample opportunity to shoot them on camera.

Other resident birds which are likely to put up a show for the visitors are the Pied Kingfisher and the Baya Weaver Bird. The sight of a Pied Kingfisher hovering over the surface of still water and then taking a spectacular dive into the water is a true treat. Watching the tiny bird in its brave attempts is sure to draw you into the drama and



Coppersmith Barbet is a small colorful bird. The famous call of Tuk-Tuk-Tuk sounds like coppersmith working on metal.



you would start wishing that the bird's dive become a success. And sure enough after two or three attempts you are likely to see the bird scoop out a tiny fish as its lunch. A sight such as this and your day is made.

Watching the Baya Weaver Bird colony with birds coming in and out of the seemingly precariously hanging nests is another wonderful sight. Spend some time observing the going-ons (something that is highly recommended for the heronries as well) in the Baya Weaver Bird colony and you would feel well treated.



A heronry located next to the road with number of Open bills, Spoonbills and Black Ibis.

SECTION 5

ENDANGERED BIRDS



The name of Siberian Cranes is stuck with the Keoladeo National Park, carrying good and bad connotations both. The endangered crane was once a much welcome winter visitor to the marshlands (it covered a distance of 6,400 kms to come to KNP from deep in Siberia). But the last recorded pair of Siberian Cranes which had made its journey from Siberia, happened in 2002. Since then the bird watchers and environmentalists have been waiting with hope for the return of the elusive crane. There have been many theories propounded for their failure to reappear in KNP, but the fact remains, the Siberian Cranes have stopped coming here. But you

never know one fine November day, the Siberian Cranes may return. The hope is still on.

Though the Siberian Crane has chosen to give the park a miss, many other endangered birds continue to live here and visit during winter months. Sarus Cranes, Greater Adjutant, White Rumped Vultures, Baikal Teal and Indian Courser are some of the highly threatened birds that can be seen in the park.

Sarus Cranes, which carry the exalted status of being depicted in the main emblem of the park, can still be found in the park and are

its special residents. These birds, which live in pairs for a lifetime, present a spectacular sight, especially when they indulge in their dance. This is actually a routine to ward off intruders which involves calling out loudly while throwing back their heads. A truly impressive and memorable sight for those who are lucky and patient enough to witness it. The park, as of now, has five pairs of these magnificent birds.



A pair of Sarus Cranes at the Keoladeo National Park.

SECTION 6

IMPORTANT ANIMALS IN THE PARK



As you enter the park, and before you spot your first Coppersmith Barbet or a Flameback Woodpecker, you are very likely to get the first welcoming look from a Jackal or a chital deer. These are some of the many animals which have made KNP their home.

The mammals make up a big part of the wildlife at KNP totaling to 25 species. Some large ones such as the Nilgai, Sambar, Hog Deer, Indian Wild Boar, Blacknaped Hare and Rhesus Monkeys are easy to spot. The more elusive mammals to the human visitors include the Striped Hyena, Indian Fox, Jungle Cat, Fishing Cat and

Small Indian Civet. The park was known to have leopards too as residents but they do not live here anymore. Once a tigress had also found its way to the park in 1999 and lived here for some years, killing a few feral cattle among other animals, before dying in 2005.

There are thirteen varieties of snakes listed in the KNP besides eight species of lizards and five species of amphibians. The snakes such as Common Krait, Common Cobra, Russell's Viper, Russell's Earth Boa and Checkered Keelback Watersnake are all

present here. Other reptiles found are the Common Indian Monitor, Yellow Monitor, Indian Mud or Flap-Shell Turtle, Ganges Softshell and Indian Sawback or Roofed Terrapin, a small species of turtle.

Many shutterbugs have been lucky enough to have clicked here the amazing sight of an Indian Python swallowing up a dear. The less fortunate ones might see a python basking in the winter sunlight or perched on a tree.



Blue Bull or “Nilgai” is the largest Asian antelope.



SECTION 7

IMPORTANT TREES IN THE PARK



Of the 29 square kilometer area of the KNP only 7.5 square kilometer is aquatic, which is full of water. The rest is made up of pockets of forest, savanna and scrub land that are all around the wetlands. These areas are rich in flora and fauna, alike.

The plant life in the KNP is sometimes as spectacular as the birds (like when the lilies bloom) and which any naturalist would point out, is the key to sustain the bird life of KNP. A lay person or a casual observer might miss the biodiversity and the richness of the flora in the KNP, but a closer inspection and a more active interest

on the vegetation all around, can be very rewarding. The botanist and naturalist have over the years found a lot for their interest in the KNP. One gets to learn the rare phenomena, where human hand and nature's play have come together in a successful partnership to create the unique ecosystem of KNP.

Kadam tree (*Neolamarckia cadamba*), which has a prime place in the stories revolving around Lord Krishna (Incarnation of Hindu God Vishnu), who is supposed to have spent his growing up years

in the nearby (15 kilometers away) Vrindavan. Kadam tree is, thus, an important tree in KNP.

The Kadam becomes more conspicuous during the months of July to September when it gets adorned by whitish yellow flowers.

Besides Kadam other native species of tree include Khajur, Babul and Khejri. Dozens of species of grasses and reeds populate the park providing a rich feeding and nesting habitat for birds and mammals alike.

During the initial development years of the park Babul trees (*Acacia nilotica*) were planted along the bunds and on dykes with the twin aims of providing a perch to the birds and a screen to the hunters. Today these babul trees, present one of the success stories of KNP, with thousands of birds finding perch and nesting sites on them.

Capparis sepiaria, a thorny climber, kair shrubs, *Suaeda fruticosa*, *Coccinia* creepers, aquatic herb *Eichhornia*, or *Jal Kumni*, are some flora that is flourishing in KNP. During post rains



Khajur trees are spread on the main access road, provide good nesting site to weaver birds.



and during winters commonly noticed along dykes and bunds are Jangli jalebi (*Maerua oblongifolia*), *Sesbania bispinosa* a plant that has yellow flowers with red or purple spots, Jangli Toria (*Luffa acutangula*) a climber with yellow flowers and the yellow Corchorus tridens among others.

The park has 379 varieties of flowering plants and a huge army of insects which can be seen moving around them. The free-floating lilies in bloom, in their hundreds, is another ‘not to be missed’ sight in the park. Many visitors come to the park post monsoon to just see these lilies.

SECTION 8

ENVIRONMENTAL THREATS TO THE PARK



The KNP has witnessed damaging droughts in 1986 and 1987. This was followed by equally difficult times in 2004 when the monsoon failed. These episodes adversely effected the flora and fauna at the KNP and it took a lot of time for the park to recover from them.

The most important factor that has played a vital role in the origin of Bharatpur swamps, still continues to be vital and holds the key for its future successful survival. It is the 540 million cubic feet of fish rich water that parks need by July to sustain and attract migrant bird population throughout the winter months. The water,

which was once diverted to the swamps from monsoon fed seasonal rivers, Gambhir and Banganga, through Ajan Dam, is not easily accessible today, owing to political and population pressures. Alternative arrangements such as piped water from Chambal River or through Gobardhan Drain, can only provide stop gap arrangements.

The main reason for the flourishing of KNP was the original diversion of water from Ajan Dam to the Bharatpur Swamps. This one step kept the swamps habitable and attractive for numerous birds for a long period of time. Naturally, this availability of water

continues to be the most important aspect for the continued healthy existence of KNP.

The main threat and cause of concern for the people associated with the park is the year round availability of fish rich water for the park. Being essentially an artificially created marshland, the national park depends on human intervention for a continued supply of water.

Poor rains in Northern Indian Plains, whenever that happens, make this much more difficult a task. This brings in the aspect of climate change. Though climate change is a worldwide phenomena, its adverse effects are particularly more telling in an environmentally sensitive area such as KNP.

The fact is, Climate change, too, is having its adverse effect on the KNP. Climate change is accepted as the cause of the failure of the monsoon in 2004 in Northern India. The last monsoon season (2014) also saw scant rains and this caused a water crisis in the park.

In such situations, there is continues tussle between the farming communities and those related with the KNP when it comes to sharing water.

Political compulsions of local leaders make it very difficult for the KNP officials to source water from the Ajan Dam site for the KNP. The debate that 'humans are



Catfish has found its way inside park and has been a serious threat to aquatic life including birds.



more important than birds' rages on. That is why the need of

educating and spreading awareness about the importance of KNP, environmentally, ecologically, economically and as a valuable heritage for the future generations, becomes very important.

The Pachna Dam which was built on Gambhir River, to stop flooding of Bharatpur is a major problem area. Over the years the height of the dam has been increased and there is always a demand for more water from the dam to be given to the villagers upstream.

In the last few years the KNP administration has been trying and has succeeded to some degree, in getting water from Chambal river, for the park. Chambal is a perennial river, unlike Gambhir and Banganga. But the water of Gambhir and Banganga are considered more laden with life supporting ingredients. As a result the environmentalist and experts associated with the KNP are of the view that Chambal water must be made available for the agricultural community around Bharatpur or up stream. Whereas more of Gambhir and Banganga water should be kept for KNP. The idea is to strike a balance, which benefits the birds and humans alike. But striking this all important balance is a difficult task.

The presence of alien species such as Prosopis juliflora and Water Hyacinth, fish such as Catfish and feral cattle are some of the real threats for KNP. Over the years and in recent past a lot of efforts of the park officials have gone into dealing with these menaces. In a sustained effort Prosopis juliflora and the catfish have been largely removed from the KNP. In a smart move the KNP administration even involved the local communities in the work, which gave them some economic benefits as well. But the work is still not complete and these foreign invasive species continue to be present in KNP. Though the efforts have been successful to some degree, a lot still needs to be done.

In 1981 with the upgradation of the erstwhile Keoladeo Bird Sanctuary to the status of a National Park, the cattle grazing was banned. What followed were strong protests by the local community who were not happy with being robbed of their pastures. The friction still continues and the problem of feral cattle or local community illegal pushing their cattle into the park still needs to be dealt with.

The increase in vehicular pollution in Bharatpur town and the area around is another problem area. Over the years the number of vehicles operating in Bharatpur and on the highways passing next to the town have increased many folds. Though the use of vehicles inside the KNP has been restricted but the air around the park continues to get polluted by the smoke being emitted by these vehicles. There is a need to address this aspect as well. The use of cleaner fuel and more efficient vehicles that fulfill the latest polluting norms are to be encouraged.

SECTION 9

COMMUNITY AROUND PARK



For its economy Bharatpur depends heavily on agriculture and tourism. There are no industries in the area with Bharatpur chiefly being a shopkeepers town though there are some art and crafts work being done. The growth in tourism has a direct impact on these shops. In addition to benefits to the shopkeepers who profit from the influx of tourists, local people employed in economic activities revolving around tourists such as taxi drivers, rickshaw pullers, guides, booksellers and makers of traditional arts and crafts, all stand to benefit. Another important aspect to be considered is the fact that as much as 30 percent of tourist visiting

the KNP come from abroad. These tourists, besides being drawn in by the natural heritage of Bharatpur are also interested in the handicrafts of Rajasthan. This aspect must also be explored further to help the local community.

To improve tourism, attention must be paid to improve the basic infrastructure in the area. Bharatpur, lies in the Golden Triangle, made up of Delhi-Jaipur-Agra, as far as foreign tourists are considered. This strategic location of Bharatpur must be used to attract more tourists which would boost the local economy and

increase the support of the KNP among the local community. In recent years some more bird sites have come to light in close proximity to KNP. These must also be included in the tourists map to make a visit to Bharatpur more attractive to tourists and bird lovers.

Here it must be mentioned that the need for responsible tourism is paramount at such a sensitive place. The tourists and visitors to the parks must ensure that they do not litter the park, do not disturb the flora, the fauna and the nesting sites.

The city of Bharatpur and a number of villages located around and along the KNP share their fortunes with the National Park. The healthy and prosperous future of the two is unmistakably linked. So at times when water availability becomes a problem for KNP and

English Transcript



Lakshman Singh

English Transcript



Gajendra Singh

English Transcript



Raju Singh Sardar

the migratory birds do not turn up, the local community depended on KNP are the first sufferers.

The National Wildlife Action Plan of India lays down a number of guidelines and steps that can be and should be taken for all round improvement of KNP and the tourism aspects associated with it. Most of these measures are being enforced diligently by the park authorities and the local administration.

KNP needs the support of these human settlements around it as a protection and the continued supply of that important ingredient, water. The KNP, in turn, provides the local community economic opportunities, infrastructural development and a global identity.

The farmers who live around the Bharatpur swamps, largely use pumped up underground water for their cultivated fields. The farmers owe this underground water they use for irrigating their fields to the hydrology of the Bharatpur swamps, which act as a great recharge aquifer. Thus, the KNP also supports the rain deprived economy of the area.

Some 35 years ago another dimension was added to the KNP. The introduction of human pulled cycle rickshaws is one of the success stories of the KNP. A total of 130 rickshaw pullers today do the job of ferrying tourists and bird lovers inside the park. These rickshaw pullers, some of whom, have been at it for decades, not only do the job of ferrying people inside the park, but they also act as well informed bird guides. Having worked in close association with many bird experts the rickshaw pullers would astound you with their knowledge of the flora and fauna of the park, the habits of the birds

and movements of the birds and with their love for the park. They are sure to regale you with anecdotes related to the park and their deep love for the park and its wild residents would be obvious to you. They do all that for rupees 100 per hour. These rickshaw pullers come from the Bharatpur town and the villages located around the park such as Ghana Jatoali, Darapur, Aghapur, Ramnagar and Mallah. They are economically depended on the park.

Most of the bird guides, which number around 95, working in the park also come from these neighbouring villages and human settlements. They work under a license from the forest department and have in fact gone through basic training course on bird watching organised by the forest department.

A number of hotels have come up in the vicinity of the KNP to cater to the international and domestic tourists who visit the National Park. The hotels not only provide ready employment to local population but also sustain the local shops and business community by getting their supplies from them. As Bharatpur town does not have any industrial units, KNP helps plug this economic void.

Naturally, these local hotel owners, hotel employees and bird guides have been at the forefront in the fight to save and preserve KNP.

SECTION 10

VISITING THE PARK



The best time to visit the park is from October to February. When it comes to tourism, Bharatpur lies in the famous Golden Triangle of India, where Delhi-Jaipur and Agra, are the three extreme points. Bharatpur, not only stands at the migratory bird highway, but it is also located in this Golden Triangle. It is located on the road from Jaipur to Agra (just 54 kms from Agra). As a result it is not much of a trouble to include Bharatpur in the itinerary. Though many tourists visit KNP as a day trip, it is always a better idea to spend a night at one of the many hotels located near the entry gate of the KNP. This way one can witness the wonders of the swamp, when it is at its

magical best, that is, during early morning hours. One can either take a rickshaw, or hire a bicycle to venture into the park. With its well organized and mapped trails, the park is pretty accessible.

A few years ago an interpretation centre has also been constructed to the right of the entry gate to the park. Here the uninitiated can get a view of what to expect when inside the park, and a crash course in the immense ecological value of the KNP and similar swamps. Keep a look out for the impressively created model of Porcupine, an elusive resident of the park.



Salim Ali interpretation Centre is a new addition to the park.



APPENDIX



SECTION 11

LIST OF BIRDS AT THE PARK

BIRDS IN KEOLADEO NATIONAL PARK

Status in the Park (Month wise)													
Sl.	Species	J	F	M	A	M	J	J	A	S	O	N	D
(Grebes)													
1	Little Grebe (Dabchick)	P	P	B	B	P	P	B	B	B	P	P	P
2	Great Crested Grebe	P	A	A	A	A	A	A	A	A	P	P	P
3	Black-necked Grebe	P	P	A	A	A	A	A	A	A	P	P	P
(Pelicans)													
4	Great White Pelican	P	P	P	A	A	A	A	A	A	A	P	P
5	Spot-billed Pelican	P	P	A	A	A	A	A	A	A	A	P	P
6	Dalmatian Pelican	P	P	P	P	A	A	A	A	A	A	P	P
(Cormorants/Shags)													
7	Little Cormorant	P	P	P	P	P	P	B	B	B	P	P	P
8	Indian Cormorant	P	A	A	A	A	A	B	B	B	P	P	P
9	Great Cormorant	P	P	A	A	A	A	B	B	B	B	B	P
(Darters)													
10	Darter (Snake-bird)	P	P	P	P	P	P	B	B	B	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

(Herons, Egrets & Bitterns)												
11	Little Egret	P	P	P	P	P	B	B	B	B	P	P
12	Western Reef-Egret	P	P	A	A	A	A	A	P	P	A	A
13	Grey Heron	B	B	B	B	B	P	P	B	B	B	P
14	Purple Heron	B	B	B	B	B	A	P	B	B	B	P
15	Great Egret	B	B	B	B	B	P	P	B	B	B	P
16	Intermediate Egret	B	B	B	B	B	P	P	B	B	B	P
17	Cattle Egret	P	P	P	P	P	P	B	B	B	P	P
18	Indian Pond-Heron	P	P	P	P	P	P	P	P	P	P	P
19	Little Heron	P	B	B	P	P	P	B	B	P	P	P
20	Black-crowned Night-Heron	P	B	B	P	P	P	B	B	P	P	P
21	Little Bittern	P	P	P	P	P	P	B	B	P	P	P
22	Yellow Bittern	P	P	A	A	A	A	A	A	A	P	P
23	Cinnamon Bittern	P	B	B	P	P	P	B	B	P	P	P
24	Black Bittern	P	B	B	P	P	P	B	B	B	P	P
25	Great Bittern	P	P	A	A	A	A	A	A	A	A	A
(Storks)												
26	Painted Stork	P	P	P	P	P	P	A	B	B	B	B
27	Asian Openbill	P	A	A	A	A	P	B	B	B	P	P
28	Black Stork	P	P	P	P	P	A	A	A	A	A	P
29	Woolly-necked Stork	P	P	P	P	P	P	P	B	B	P	P
30	White Stork	A	P	P	A	A	A	A	A	A	A	A

P	Presence in Park
A	Absent from Park
B	Breeding in Park

31	Black-necked Stork	P	P	P	P	P	P	B	B	B	B	B
32	Lesser Adjutant-Stork	A	A	P	P	P	P	A	A	A	A	A
33	Greater adjutant stork	A	P	P	P	A	A	A	A	A	A	A
(Ibises & Spoonbills)												
34	Glossy Ibis	P	P	P	A	A	A	A	P	P	P	P
35	Black-headed Ibis	P	P	P	P	P	P	B	B	B	P	P
36	Black Ibis	A	A	A	P	P	P	A	A	A	A	A
37	Eurasian Spoonbill	P	P	P	P	P	P	P	B	B	B	P
(Flamingos)												
38	Greater Flamingo	A	A	P	P	A	A	A	P	P	A	A
39	Lesser Flamingo	A	A	P	P	A	A	A	P	P	A	A
(Geese & Ducks)												
40	Lesser Whistling-Duck	P	B	B	P	P	P	B	B	P	P	P
41	Greater White-fronted Goose	P	P	A	A	A	A	A	A	A	A	P
42	Lesser White-fronted Goose	P	P	A	A	A	A	A	A	A	A	A
43	Greylag Goose	P	P	A	A	A	A	A	A	P	P	P
44	Bar-headed Goose	P	P	P	P	A	A	A	A	P	P	P
45	Ruddy Shelduck	P	P	P	P	A	A	A	A	P	P	P
46	Common Shelduck	P	P	P	A	A	A	A	A	A	P	P
47	Comb Duck	P	P	P	P	P	P	P	B	B	P	P
48	Cotton Pygmy-Goose	P	P	P	P	P	P	B	B	B	P	P
49	Gadwall	P	P	P	A	A	A	A	A	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

50	Falcated Duck	P	P	P	A	A	A	A	A	P	P	P
51	Eurasian Wigeon	P	P	P	A	A	A	A	A	P	P	P
52	Mallard	P	P	A	A	A	A	A	A	A	P	P
53	Spot-billed Duck	P	P	B	B	P	P	B	B	P	P	P
54	Northern Shoveller	P	P	P	P	A	A	A	A	P	P	P
55	Northern Pintail	P	P	P	A	A	A	A	A	P	P	P
56	Garganey	P	P	P	P	A	A	A	P	P	P	P
57	Baikal Teal	P	P	A	A	A	A	A	A	A	P	P
58	Common Teal	P	P	P	A	A	A	A	A	P	P	P
59	Marbled Teal	P	P	A	A	A	A	A	A	A	P	P
60	Red-crested Pochard	P	P	A	A	A	A	A	A	A	A	P
61	Common Pochard	P	P	A	A	A	A	A	A	A	P	P
62	Ferruginous Pochard	P	P	A	A	A	A	A	A	A	P	P
63	Tufted Pochard	P	P	A	A	A	A	A	A	P	P	P
(Raptors)												
64	Oriental Honey-Buzzard	P	P	P	B	B	B	P	P	P	P	P
65	Black-shouldered Kite	P	P	B	B	B	P	P	P	B	B	P
66	Black Kite	P	P	P	P	P	P	P	P	P	P	P
67	Brahminy Kite	A	A	A	A	A	A	A	P	P	P	P
68	Pallas's Fish-Eagle	P	P	P	P	A	A	A	B	B	B	P
69	White-tailed Eagle	P	P	A	A	A	A	A	A	P	P	P
70	Lesser Fish Eagle	P	P	A	A	A	A	A	A	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

71	Grey headed fish eagle	A	A	A	A	A	A	A	A	P	P	P
72	Egyptian Vulture	P	P	B	B	B	P	P	P	P	P	P
73	White-rumped Vulture	B	B	B	B	P	P	P	P	P	P	P
74	Long-billed Vulture	P	P	P	P	P	P	P	P	P	P	P
75	Eurasian Griffon	P	P	A	A	A	A	A	A	A	P	P
76	Cinereous Vulture	P	P	A	A	A	A	A	A	A	P	P
77	Red-headed Vulture	B	B	P	P	P	P	P	P	P	P	P
78	Short-toed Snake-Eagle	P	B	B	P	P	P	P	P	P	P	P
79	Crested Serpent-Eagle	P	P	P	A	A	A	A	A	P	P	P
80	Eurasian Marsh Harrier	P	P	P	A	A	A	A	P	P	P	P
81	Hen Harrier	P	P	P	A	A	A	A	A	P	P	P
82	Pallid Harrier	P	P	P	A	A	A	A	A	P	P	P
83	Pied Harrier	P	P	P	A	A	A	A	A	P	P	P
84	Montagu's Harrier	P	P	P	A	A	A	A	A	A	P	P
85	Shikra	P	B	B	P	P	P	P	P	P	P	P
86	Besra	P	P	P	A	A	A	A	A	A	P	P
87	Eurasian Sparrowhawk	P	P	P	A	A	A	A	A	A	P	P
88	Northern Goshawk	P	P	P	A	A	A	A	A	A	P	P
89	White-eyed Buzzard	P	P	P	A	A	A	A	A	A	P	P
90	Common Buzzard	P	P	P	P	P	A	A	P	P	P	P
91	Long-legged Buzzard	P	P	P	A	A	A	A	A	P	P	P
92	Lesser Spotted Eagle	P	P	B	B	B	P	P	P	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

93	Greater Spotted Eagle	P	P	P	A	A	A	A	A	P	P	P
94	Tawny Eagle	P	P	P	A	A	A	A	A	A	P	P
95	Steppe Eagle	P	P	P	A	A	A	A	A	A	P	P
96	Imperial Eagle	P	P	P	A	A	A	A	A	A	P	P
97	Bonelli's Eagle	P	P	A	A	A	A	A	A	A	P	P
98	Booted Eagle	P	P	P	A	A	A	A	A	P	P	P
99	Osprey	P	P	P	A	A	A	A	A	P	P	P
100	Common Kestrel	P	P	P	A	A	A	A	A	P	P	P
101	Red-necked Falcon	P	P	P	A	A	A	A	A	P	P	P
102	Merlin	P	P	P	A	A	A	A	A	P	P	P
103	Laggar Falcon (Laggar)	P	P	A	A	A	A	A	A	P	P	P
104	Shaheen Falcon (Saker)	P	P	A	A	A	A	A	A	A	P	P
105	Peregrine Falcon	P	P	P	A	A	A	A	A	A	P	P
(Pheasants, Partridges, Quails)												
106	Black Francolin	P	P	B	B	B	P	P	P	P	P	P
107	Grey Francolin	P	P	B	B	B	P	P	B	B	P	P
108	Jungle Bush-Quail	P	P	B	B	B	P	P	P	P	P	P
109	Indian Peafowl	P	P	P	P	P	P	B	B	P	P	P
(Buttonquails/ Bustardquails)												
110	Barred Buttonquail	P	P	P	B	B	B	B	P	P	P	P
111	Rain Quail	A	A	A	P	P	P	P	P	A	A	A
(Cranes)												

P	Presence in Park
A	Absent from Park
B	Breeding in Park

112	Siberian Crane	P P P A A A A A A A P P										
113	Sarus Crane	P B B B B P P B B B B P										
114	Demoiselle Crane	P A A A A A A A A P P P										
115	Common Crane	P P P A A A A A A P P P										
(Floricans)												
116	Lesser Florican	A A A A A A A A A A A A										
(Rails, Crakes, Moorhens, Coots)												
117	Water Rail	P P P A A A A P P P P P										
118	Brown Crake	P P P P P P P P P P P P										
119	White-breasted Waterhen	P B B P P P B B B B P P										
120	Baillon's Crake	P P P A A A A P P P P P										
121	Spotted Crake	P A A A A A A P P P P P										
122	Ruddy-breasted Crake	P P P A A A A P P P P P										
123	Watercock	A A A A A P P B B P P A										
124	Purple Moorhen	P P P P P P P B B P P P										
125	Common Moorhen	P P P P P P P B B P P P										
126	Common Coot	P P P A A A A P P P P P										
(Jacanas)												
127	Pheasant-tailed Jacana	P B B P P P P B B P P P										
128	Bronze-winged Jacana	P B B P P P P B B P P P										
(Painted-Snipes)												
129	Greater Painted-Snipe	P B B B B P P P P P P P										

P	Presence in Park
A	Absent from Park
B	Breeding in Park

(Plovers & Lapwings)												
130	Pacific Golden-Plover	P	P	A	A	A	A	A	P	P	P	P
131	Common Ringed Plover	P	P	P	A	A	A	A	A	P	P	P
132	Little Ringed Plover	P	P	P	A	A	A	A	A	P	P	P
133	Kentish Plover	P	P	P	A	A	A	A	A	P	P	P
134	Northern Lapwing	P	P	A	A	A	A	A	A	A	A	P
135	Yellow-wattled Lapwing	P	P	B	B	B	P	P	P	P	P	P
136	River Lapwing	P	P	P	P	P	P	P	P	P	P	P
137	Grey-headed Lapwing	P	P	P	A	A	A	A	A	A	P	P
138	Red-wattled Lapwing	P	P	B	B	B	B	B	P	P	P	P
139	Sociable Lapwing	P	P	A	A	A	A	A	A	A	P	P
140	White-tailed Lapwing	P	P	P	A	A	A	A	P	P	P	P
(Waders)												
141	Eurasian Woodcock	P	P	A	A	A	A	A	A	A	P	P
142	Pintail Snipe	P	P	P	A	A	A	A	A	A	A	P
143	Common Snipe	P	P	P	P	A	A	A	A	P	P	P
144	Jack Snipe	P	P	P	A	A	A	A	P	P	P	P
145	Black-tailed Godwit	P	P	P	P	A	A	A	P	P	P	P
146	Eurasian Curlew	P	P	P	A	A	A	A	P	P	P	P
147	Spotted Redshank	P	P	P	P	P	A	A	P	P	P	P
148	Common Redshank	P	P	P	P	A	A	A	P	P	P	P
149	Marsh Sandpiper	P	P	P	A	A	A	A	P	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

150	Common Greenshank	P P P A A A A P P P P P									
151	Green Sandpiper	P P P P A A A P P P P P									
152	Wood Sandpiper	P P P P A A A P P P P P									
153	Common Sandpiper	P P P P A A A P P P P P									
154	Long billed Dowitcher	P P A A A A A A A A A A									
155	Little Stint	P P P A A A A A P P P P P									
156	Temminck's Stint	P P P A A A A A P P P P P									
157	Dunlin	P P P A A A A A P P P P P									
158	Curlew Sandpiper	P P P A A A A A P P P P P									
159	Spoonbill Sandpiper	P P P A A A A A P P P P P									
160	Ruff	P P P A A A A A P P P P P									
161	Black-winged Stilt	P P P P P P P P P P P P									
162	Pied Avocet	P P A A A A A A A A A P									
163	Eurasian Thick-Knee	P P B B B P P P P P P P									
164	Great Thick-Knee	P P A A A A A A A A P P									
(Coursers & Pratincoles)											
165	Indian Courser	P P B B B P P P P P P P									
166	Collared Pratincole	P A A A A P P P P P P P									
167	Small Pratincole	P P P A A A A A A P P P									
168	Oriental pratincole	A P P A A A A A A A A A									
(Gulls & Terns)											
169	Herring Gull	P P P A A A A A A A P P									

P	Presence in Park
A	Absent from Park
B	Breeding in Park

170	Brown-headed Gull	P P P P A A A A P P P										
171	Black-headed Gull	P P A A A A A A A P P										
172	Gull-billed Tern	P P P P A A A A A P P										
173	River Tern	P P P A A A A A P P P										
174	Little Tern	P P P P A A P P P P P										
175	Black-bellied Tern	P P P A A A A P P P P										
176	Whiskered Tern	P P P A A A A A P P P										
177	Indian Skimmer	P P A A A A A A A A P P										
(Sandgrouse)												
178	Chestnut-bellied Sandgrouse	P P B B B B P P P P P										
(Pigeons & Doves)												
179	Rock Pigeon	P P P B B B P P P P P										
180	Oriental Turtle-Dove	P P P A A A A A A A P P										
181	Laughing Dove	P P P B B B B P P P P										
182	Spotted Dove	P P P A A A A A A P P P										
183	Red Collared-Dove	P P B B B B B P P P P										
184	Eurasian Collared-Dove	P P B B B B B P P P P										
185	Yellow-legged Green-Pigeon	P P B B B B B P P P P										
(Parakeets)												
186	Rose-ringed Parakeet	P B B B B B P P P P P										
187	Plum-headed Parakeet	P P P A A A A A A P P P										
(Cuckoos, Malkohas & Coucals)												

P	Presence in Park
A	Absent from Park
B	Breeding in Park

188	Pied Cuckoo	A	A	A	A	P	B	B	B	B	P	P	A
189	Common Hawk Cuckoo	P	B	B	B	B	B	B	P	P	P	P	P
190	Eurasian Cuckoo	A	A	A	A	A	P	P	P	A	A	A	A
191	Grey-bellied Cuckoo	A	A	A	A	P	P	P	P	A	A	A	A
192	Drongo Cuckoo	P	P	A	A	A	A	A	A	A	A	A	P
193	Asian Koel	P	P	P	P	B	B	B	B	P	P	P	P
194	Sirkeer Malkoha	P	B	B	B	B	B	P	P	P	P	P	P
195	Greater Coucal	P	B	B	B	B	B	B	B	P	P	P	P
(Owls)													
196	Barn Owl	P	P	P	P	P	P	P	P	P	P	P	P
197	Oriental Scops-Owl	P	P	P	A	A	A	A	A	A	P	P	P
198	Collared Scops-Owl	P	P	B	B	P	P	P	P	P	P	P	P
199	Eurasian Eagle-Owl	P	P	A	A	A	A	A	A	A	A	P	P
200	Dusky Eagle-Owl	B	B	P	P	P	P	P	P	B	B	B	B
201	Brown Fish-Owl	P	P	P	P	P	P	P	P	P	P	P	P
202	Mottled Wood-Owl	P	B	B	B	B	B	P	P	P	P	P	P
203	Spotted Owlet	P	P	B	B	B	B	P	P	P	P	P	P
204	Brown Hawk Owl	P	P	P	A	A	A	A	A	P	P	P	P
205	Short-eared Owl	P	P	P	A	A	A	A	A	P	P	P	P
(Nightjars)													
206	Grey Nightjar	P	P	P	A	A	A	A	A	P	P	P	P
207	Large-tailed Nightjar	P	P	P	A	A	A	A	A	P	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

208	Indian Nightjar	P	P	P	A	A	A	A	A	P	P	P
209	Savanna Nightjar	A	P	B	B	B	P	P	P	P	A	A
(Swifts)												
210	Asian Palm-Swift	P	B	B	B	B	P	P	P	P	P	P
211	House Swift	P	P	P	P	P	P	P	P	P	P	P
(Kingfishers)												
212	Common Kingfisher	P	B	B	B	B	P	P	P	P	P	P
213	Stork-billed Kingfisher	P	P	A	A	A	A	A	A	A	P	P
214	White-throated Kingfisher	P	P	B	B	B	P	P	P	P	P	P
215	Black-capped Kingfisher	P	P	P	A	A	A	A	A	P	P	P
216	Pied Kingfisher	P	P	P	P	P	P	P	P	P	P	P
(Bee-eaters)												
217	Green Bee-eater	P	P	B	B	B	B	P	P	P	P	P
218	Blue-cheeked Bee-eater	A	A	A	A	A	A	A	A	P	P	A
219	Blue-tailed Bee-eater	P	P	P	P	P	P	P	P	P	P	P
(Rollers)												
220	European Roller	P	P	P	A	A	A	A	A	P	P	P
221	Indian Roller	P	P	B	B	B	B	P	P	P	P	P
(Hoopoes)												
222	Common Hoopoe	P	B	B	B	B	P	P	P	P	P	P
(Hornbills)												
223	Indian Grey Hornbill	P	P	B	B	B	B	P	P	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

(Barbets)												
224	Brown-headed Barbet	P	P	B	B	B	B	P	P	P	P	P
225	Coppersmith Barbet	P	P	B	B	B	B	P	P	P	P	P
(Woodpeckers)												
226	Eurasian Wryneck	P	P	P	A	A	A	A	A	P	P	P
227	Brown-capped Pygmy Woodpecker	P	P	B	B	B	P	P	P	P	P	P
228	Yellow-crowned Woodpecker	P	P	B	B	B	B	P	P	P	P	P
229	Black-rumped Flameback	P	P	B	B	B	B	P	P	P	P	P
(Pittas)												
230	Indian Pitta	A	A	A	A	A	P	P	P	A	A	A
(Larks)												
231	Singing Bush-Lark	P	P	P	P	P	P	P	P	P	P	P
232	Indian Bush-Lark	P	P	B	B	P	P	P	P	P	P	P
233	Ashy-crowned Sparrow-Lark	P	B	B	B	B	P	P	P	P	P	P
234	Rufous-tailed Lark	P	P	B	B	B	P	P	P	P	P	P
235	Greater Short-toed Lark	A	A	A	A	A	A	A	A	A	A	A
236	Crested Lark	P	P	B	B	P	P	P	P	P	P	P
237	Sykes's Crested Lark	P	P	A	A	A	A	A	A	A	P	P
238	Eurasian Skylark	P	P	P	A	A	A	A	A	A	P	P
239	Bimaculated Lark	P	P	P	A	A	A	A	A	A	P	P
240	Oriental Skylark	P	P	P	P	P	P	P	P	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

(Swallows & Martins)												
241	Sand Martin	P	P	P	A	A	A	A	A	A	P	P
242	Plain Martin	P	P	P	A	A	A	A	A	A	P	P
243	Dusky Crag-Martin	P	P	P	P	P	P	P	P	P	P	P
244	Barn Swallow	P	P	P	A	A	A	A	A	P	P	P
245	Wire-tailed Swallow	P	P	B	B	P	P	B	B	B	P	P
246	Red-rumped Swallow	A	A	P	P	P	P	P	A	A	A	A
247	Streak-throated Swallow	A	A	P	P	P	P	P	A	A	A	A
(Wagtails & Pipits)												
248	Forest Wagtail	A	P	P	P	P	A	A	A	A	A	A
249	White Wagtail	P	P	P	A	A	A	A	A	P	P	P
250	White-browed Wagtail	P	P	B	B	B	P	P	P	P	P	P
251	Citrine Wagtail	P	P	P	A	A	A	A	A	P	P	P
252	Yellow Wagtail	P	P	P	A	A	A	A	A	P	P	P
253	Grey Wagtail	P	P	P	A	A	A	A	A	P	P	P
254	Richard's Pipit	P	P	P	A	A	A	A	A	P	P	P
255	Paddyfield Pipit	P	P	B	B	B	P	P	P	P	P	P
256	Tawny Pipit	P	P	P	A	A	A	A	A	P	P	P
257	Tree Pipit	P	P	P	A	A	A	A	A	P	P	P
258	Olive-backed Pipit	P	P	P	A	A	A	A	A	P	P	P
259	Rosy Pipit	P	P	P	A	A	A	A	A	P	P	P
260	Long-billed Pipit	P	P	P	A	A	A	A	A	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

261	Water Pipit	P	P	P	A	A	A	A	A	P	P	P
(Shrikes & Minivets)												
262	Large Cuckoo-Shrike	P	P	P	A	A	A	A	P	P	P	P
263	Black-winged Cuckoo-Shrike	P	P	P	A	A	A	P	P	P	P	P
264	Small Minivet	P	P	B	B	B	P	P	P	P	P	P
265	White-bellied Minivet	P	P	P	A	A	A	A	A	P	P	P
266	Long-tailed Minivet	P	P	P	A	A	A	A	A	P	P	P
267	Scarlet Minivet	P	P	P	A	A	A	A	A	P	P	P
268	Short-billed Minivet	P	P	P	A	A	A	A	A	P	P	P
269	Common Wood shrike	P	P	B	B	B	B	P	P	P	P	P
270	Red-backed Shrike	P	P	A	A	A	A	A	A	P	P	P
271	Rufous-tailed Shrike	P	P	P	A	A	A	A	A	A	P	P
272	Brown Shrike	P	P	P	A	A	A	A	A	P	P	P
273	Bay-backed Shrike	P	P	B	B	B	B	P	P	P	P	A
274	Long-tailed Shrike	P	P	B	B	B	B	P	P	P	P	P
275	Southern Grey Shrike	P	P	P	P	P	P	P	P	P	P	P
(Bulbuls)												
276	Red-whiskered Bulbul	P	P	P	A	A	A	A	A	P	P	P
277	White-eared Bulbul	P	P	B	B	B	B	P	P	P	P	P
278	Red-vented Bulbul	P	P	B	B	B	B	P	P	P	P	P
(Loras)												
279	Common Iora	P	P	P	A	A	A	A	A	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

280	Marshall's Iora	P	P	B	B	B	B	P	P	P	P	P	P
(Thrushes, Robins & Wheatears)													
281	Blue-capped Rock Thrush	P	P	A	A	A	A	A	A	A	P	P	
282	Blue Rock-Thrush	P	P	P	P	P	P	P	P	P	P	P	P
283	Orange-headed Thrush	P	P	P	A	A	A	A	A	A	P	P	
284	Scaly Thrush	P	P	P	A	A	A	A	A	A	P	P	
285	Tickell's Thrush	P	P	P	A	A	A	A	A	A	P	P	
286	Black-breasted Thrush	P	P	A	A	A	A	A	A	A	P	P	
287	Grey-winged Blackbird	P	P	P	A	A	A	A	A	A	P	P	
288	Siberian Rubythroat	P	P	P	A	A	A	A	A	A	P	P	
289	White-tailed Rubythroat	P	P	P	A	A	A	A	A	A	P	P	
290	Bluethroat	P	P	P	A	P	A	A	A	A	P	P	
291	Oriental Magpie-Robin	P	P	P	B	B	P	P	P	P	P	P	P
292	Indian Robin	P	P	P	B	B	P	P	P	P	P	P	P
293	Black Redstart	P	P	P	A	A	A	A	A	A	P	P	P
294	Common Stonechat	P	P	P	A	A	A	A	A	A	P	P	P
295	White-tailed Stonechat	P	P	P	A	A	A	A	A	A	P	P	P
296	Pied Bushchat	P	P	P	B	B	B	P	P	P	P	P	P
297	Grey Bushchat	P	P	P	A	A	A	A	A	A	P	P	P
298	Variable Wheatear	P	P	P	A	A	A	A	A	A	P	P	P
299	Desert Wheatear	P	P	P	A	A	A	A	A	A	P	P	P
300	Isabelline Wheatear	P	P	P	A	A	A	A	A	A	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

301	Pied Wheatear	P	P	P	A	A	A	A	A	P	P	P
302	Brown Rock-Chat	P	P	P	B	B	B	P	P	P	P	P
(Babblers)												
303	Yellow-eyed Babbler	P	P	P	P	P	B	B	B	P	P	P
304	Common Babbler	P	P	B	B	B	P	P	P	P	P	P
305	Large Grey Babbler	P	P	P	P	P	B	B	B	P	P	P
306	Jungle Babbler	P	P	P	P	P	B	B	B	P	P	P
(Prinias & Warblers)												
307	Ziting Cisticola	P	P	P	P	P	B	B	B	P	P	P
308	Ashy Prinia	P	P	B	B	B	B	B	B	P	P	P
309	Plain Prinia	P	P	B	B	B	B	B	B	P	P	P
310	Cetti's Bush-Warbler	P	P	P	A	A	A	A	A	A	P	P
311	Lanceolated Warbler	P	P	P	A	A	A	A	A	A	P	P
312	Paddyfield Warbler	P	P	P	A	A	A	A	A	A	P	P
313	Blyth's Reed-Warbler	P	P	P	A	A	A	A	A	A	P	P
314	Clamorous Reed Warbler	P	P	P	A	A	A	A	A	A	P	P
315	Booted Warbler	P	P	P	A	A	A	A	A	A	P	P
316	Common Tailorbird	P	P	B	B	B	B	B	P	P	P	P
317	Common Chiffchaff	P	P	P	A	A	A	A	A	A	P	P
318	Plain Leaf-Warbler	P	P	P	A	A	A	A	A	A	P	P
319	Dusky Warbler	P	P	P	A	A	A	A	A	A	P	P
320	Tickell's leaf Warbler	P	P	P	A	A	A	A	A	A	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

321	Sulphur-bellied Warbler	P P P A A A A A A A P P										
322	Brooks's Leaf-Warbler	P P P A A A A A A A P P										
323	Hume's Warbler	P P P A A A A A A A P P										
324	Greenish Warbler	P P P A A A A A A A P P										
325	Lesser Whitethroat	P P P A A A A A A A A P P										
326	Orphean Warbler	P P P A A A A A A A A P P										
327	Moustached Warbler	P P P A A A A A A A A P P										
328	Yellow-browed Warbler	P P P A A A A A A A A P P										
(Flycatchers)												
329	Rusty-tailed Flycatcher	P P A A A A A A A A P P										
330	Red-throated Flycatcher	P P P A A A A A A A A P P										
331	Ultramarine Flycatcher	P P P A A A A A A A A P P										
332	Verditer Flycatcher	P P P A A A A A A A A P P										
333	Tickell's Blue-Flycatcher	P P P A A A A A A A A P P										
334	Grey-headed Canary Flycatcher	P P P A A A A A A A A P P										
335	Asian Paradise-Flycatcher	P P P P B B B B P P P P										
336	White-browed Fantail	P P P A A A A A A A A P P										
(Tits)												
337	Fire-capped Tit	P P P A A A A A A A A P P										
338	Great Tit	P P A A A A A A A A A P P										
(Nuthatches & Tree creepers)												
337	Chestnut-bellied Nuthatch	P B B B P P P P P P P P										

P	Presence in Park
A	Absent from Park
B	Breeding in Park

340	Spotted Creeper	P P P P P P P P P P P P	
	(Sunbirds)		
341	Purple Sunbird	P B B B B P P P P P P	
	(White eyes)		
342	Oriental White-eye	P P P P P P B B B P P P	
	(Buntings, Finches & Munias)		
343	Crested Bunting	P P P P P A A A A A P P	
344	White-capped Bunting	P P P A A A A A A A P P	
345	Black-headed Bunting	P P P P A A A A A A P P	
346	Red-headed Bunting	P P P P A A A A A A P P	
347	Common Rosefinch	P P P P P A A A A A A A	
348	Red Avadavat (Red Munia)	P P P P P P P P B B P P	
349	Indian Silverbill	P P P P P P P P B B P P	
350	Scaly-breasted Munia	P P P P P P P P B B P P	
351	Black-headed Munia	P P P P P P P P P P P P	
	(Sparrows & Weavers)		
352	House Sparrow	P B B B B B B P P P P P	
353	Spanish Sparrow	P P A A A A A A A A P P	
354	Chestnut-shouldered Petronia	P P B B B P P P P P P P	
355	Black-breasted Weaver	P P P P P P P B B P P P	
356	Streaked Weaver	P P P P P P P P P P P P	
357	Baya Weaver	P P P P P P B B B P P P	

P	Presence in Park
A	Absent from Park
B	Breeding in Park

(Starlings & Mynas)												
		P	P	B	B	B	B	P	P	P	P	P
358	Brahminy Starling	P	P	B	B	B	B	P	P	P	P	P
359	Rosy Starling	P	P	P	A	A	A	A	P	P	P	A
360	Common Starling	P	P	A	A	A	A	A	A	A	P	P
361	Asian Pied Starling	P	P	P	B	B	B	B	P	P	P	P
362	Common Myna	P	P	P	B	B	B	B	B	P	P	P
363	Chestnut-tailed Starling	P	P	A	A	A	A	A	A	A	P	P
364	Bank Myna	P	P	P	B	B	B	B	B	P	P	P
(Orioles)												
365	Eurasian Golden Oriole	P	P	P	P	P	B	B	B	P	P	P
366	Black-headed Oriole	P	P	P	A	A	A	A	A	P	P	P
367	Black-naped Oriole	P	P	P	A	A	A	A	A	A	A	A
(Drongos)												
368	Black Drongo	P	P	P	B	B	B	B	P	P	P	P
369	Ashy Drongo	P	P	A	A	A	A	A	A	A	P	P
370	White-bellied Drongo	P	P	A	A	A	A	A	A	A	P	P
371	Spangled Drongo	P	P	A	A	A	A	A	A	A	A	P
372	Greater Racket-tailed Drongo	P	P	A	A	A	A	A	A	A	A	P
(Crows, Jays & Treepies)												
373	Rufous Treepie (Indian Treepie)	P	P	B	B	B	B	P	P	P	P	P
374	House Crow	P	B	B	B	B	B	P	P	P	P	P
375	Large-billed Crow (Jungle Crow)	P	B	B	B	B	B	P	P	P	P	P

P	Presence in Park
A	Absent from Park
B	Breeding in Park

SECTION 12

ANIMALS AND TREES LIST

ANIMALS IN KEOLADEO NATIONAL PARK

Common Name	Latin Name
Short-nosed fruit-bat	<i>Cynopterus sphinx</i>
Black buck	<i>Antilope cervicapra</i>
Blue bull	<i>Boselaphus tragocamelus</i>
Fishing cat	<i>Felis viverrina</i>
Jungle cat	<i>Felis chaus</i>
Small Indian civet	<i>Viverricula indica</i>
Common palm civet	<i>Paradoxurus hermaphroditus</i>
Spotted deer	<i>Axis axis</i>
Sambar deer	<i>Cervus unicolor</i>
Indian fox	<i>Vulpes bengalensis</i>
Flying fox	<i>Pteropus giganteus</i>
Indian gerbille	<i>Tatera indica</i>
Rufous-tailed hare	<i>Lepus ruficaudatus</i>
Long-eared hedgehog	<i>Hemiechinus auritus</i>

Common Name	Latin Name
Striped hyena	<i>Hyaena hyaena</i>
Jackal	<i>Canis aureus</i>
Common langur	<i>Presbytis entellus</i>
Common mongoose	<i>Herpestes edwardsi</i>
Indian small mongoose	<i>Herpestes auropunctatus</i>
House mouse	<i>Mus musculus</i>
Indian smooth otter	<i>Lutra perspicillata</i>
Indian pangolin	<i>Manis crassicaudata</i>
Indian porcupine	<i>Hystrix Indica</i>
Rhesue macaque	<i>Macaca mulatta</i>
Common house rat	<i>Rattus rattus</i>
Five-striped palm squirrel	<i>Funambulus pennanti</i>
House shrew	<i>Suncus murinus</i>
Indian wild boar	<i>Susero fa cristatus</i>

BUTTERFLIES IN KEOLADEO NATIONAL PARK

Common Name	Latin Name
Striped Tiger	<i>Danaus genutia</i>
Tawny Coster	<i>Acraea violae</i>
Tiny Grass Blue	<i>Zizula hylax</i>
White Orange Tip	<i>Ixias marianne</i>
Yellow Orange Tip	<i>Ixias pyrene linnaeus</i>
Yellow Pansy	<i>Junonia hirta</i>
Zebra Blue	<i>Leptotes plinius</i>
Baronet	<i>Symphaedra nais</i>
Blue Pansy	<i>Junonia (orithya) swinhoei</i>
Blue Tiger	<i>Tirumala Limniace</i>
Bright Babul Blue	<i>Azanus ubaldus Cramer</i>
Brown Awl	<i>Badamia exclamationis</i>
Chocolate Pansy	<i>Junonia iphita</i>
Commander	<i>Moduza (procris) undifragus</i>
Common Jezebel	<i>Delias eucharis</i>
Common Castor	<i>Ariadne merione</i>
Common Gull	<i>Cepora (nerissa) phryne</i>

Common Name	Latin Name
Common Indian Crow	<i>Euploea core</i>
Common Leopard	<i>Phalanta phalantha</i>
Common Mime	<i>Chilasa clytia</i>
Common Mormon	<i>Papilio polytes</i>
Common Pierrot	<i>Castalius rosimon</i>
Common Rose	<i>Pachliopta aristolochiae</i>
Common Shot Silverline	<i>Aphnaeus ictis</i>
Common Silverline	<i>Spindasis vulcanus (Fabricius)</i>
Common Wanderer	<i>Pareronia valeria</i>
Crimson Rose	<i>Pachliopta hector</i>
Danaid Eggfly	<i>Hypolimnasmisippus</i>
Danaid Eggfly	<i>Hypolimnasmisippus (Female)</i>
Dark Cerulean	<i>Jamides bochus</i>
Forget-me-not	<i>Catochrysops Strabo</i>
Grass Demon	<i>Udaspes folus</i>
Grass Jewel	<i>Freyeria trochilus</i>
Great Eggfly	<i>Hypolimnas bolina</i>

Common Name	Latin Name
Grey Pansy	<i>Junonia atlites</i>
Guava Blue	<i>Virachola isocrates</i>
Indian Grizzled Skipper	<i>Spialia galba</i>
Indian Palm Bob	<i>Suastus gremius</i>
Indian Red Flash	<i>Rapala iarbus</i>
Lemon Pansy	<i>Junonia lemonias</i>
Lime Butterfly	<i>Papilio demoleus</i>
Painted Lady	<i>Vanessa cardui</i>
Pale Grass Blue	<i>Pseudozizeeria (maha) ossa</i>
Pea Blue	<i>Lampides boeticus</i>
Peacock Pansy	<i>Junonia almanac</i>
Pioneer	<i>Belenois aurota</i>
Plain Tiger	<i>Danaus chrysippus</i>
Psyche	<i>Leptosia nina</i>
Small Salmon Arab	<i>Colotis amata</i>

DRAGONFLIES IN KEOLADEO NATIONAL PARK

Common Name	Latin Name
Ditch Jewel	<i>Brachythemis contaminata</i> (Male)
Fulvous Forest Skimmer	<i>Neurothemis fulvia</i> (Female)
Fulvous Forest Skimmer	<i>Neurothemis fulvia</i> (Male)
Golden Dartlet	<i>Ischnura aurora</i>
Granite Ghost	<i>Bradinopyga geminata</i>
Green Marsh Hawk	<i>Orthetrum sabina</i>
Ground Skimmer	<i>Diplacodes trivialis</i> (Female)
Ground Skimmer	<i>Diplacodes trivialis</i> (Male)
Lesser Emperor	<i>Anax parthenope</i>
Light-tipped Demon	<i>Indothemis carnatica</i> (Female)
Light-tipped Demon	<i>Indothemis carnatica</i> (Male)
Little Blue	<i>Enallagma parvum</i>
Long-legged Marsh Glider	<i>Trithemis pallidinervis</i>
Malay Lily Squatter	<i>Paracercion malayanum</i>
Orange-winged Drop Wing	<i>Trithemis kirbyi</i>
Parakeet Darner	<i>Gynacantha bayadera</i>
Pied Paddy Skimmer	<i>Neurothemis tullia</i>

Common Name	Latin Name
Pixie Dartlet	<i>Rhodishnura nusseri</i>
Red Marsh Trotter	<i>Tramea basilaris</i>
Yellow-Tailed Ashy Skimmer	<i>Potamarcha congener</i>
Ruddy Marsh Skimmer	<i>Crocothemis servilia</i> (Female)
Ruddy Marsh Skimmer	<i>Crocothemis servilia</i> (Male)
Ruddy Meadow Skimmer	<i>Neurothemis intermedia</i> (Female)
Ruddy Meadow Skimmer	<i>Neurothemis intermedia</i> (Male)
Rusty Darner	<i>Anaciaeschna jaspidea</i>
Senegal Golden Dartlet	<i>Ischnura senegalensis</i>
Slender Blue Skimmer	<i>Orthetrum luzonicum</i> (Female)
Slender Blue Skimmer	<i>Orthetrum luzonicum</i> (Male)
Small Skimmer	<i>Orthetrum taeniolatum</i> (Female)
Small Skimmer	<i>Orthetrum taeniolatum</i> (Male)
Spread Wing	<i>Lestes umbrinus</i>
Trumpet Tail	<i>Acisoma panorpoides</i> (Female)
Trumpet Tail	<i>Acisoma panorpoides</i> (Male)
Wandering Glider	<i>Pantala flavescens</i>

Common Name	Latin Name
Asiatic Bloodtail	<i>Lathrecista asiatica</i> (Female)
Asiatic Bloodtail	<i>Lathrecista asiatica</i> (Male)
Black Stream Glider	<i>Trithemis festiva</i>
Black Tailed Dasher	<i>Brachydiplax farinosa</i>
Blue Darner	<i>Anax immaculifrons</i>
Blue Slim	<i>Aciagrion pallidum</i>
Brown Dusk Hawk	<i>Zyxomma petiolatum</i>
Common Clubtail	<i>Ictinogomphus rapax</i>
Common Hook Tail	<i>Paragomphus lineatus</i>
Common Picture wing	<i>Rhyothemis variegata</i>
Coral-tailed Cloud Wing	<i>Tholymis tillarga</i> (Female)
Coral-tailed Cloud Wing	<i>Tholymis tillarga</i> (Male)
Crimson Marsh Glider	<i>Trithemis aurora</i> (Female)
Crimson Marsh Glider	<i>Trithemis aurora</i> (Male)
Crimson-tailed Marsh Hawk	<i>Orthetrum pruinosum</i>
Deccan Bowtail	<i>Macrogomphus annulatus</i>
Ditch Jewel	<i>Brachythemis contaminata</i> (Female)

FISHES IN KEOLADEO NATIONAL PARK

Common Name	Latin Name
Suiya	<i>Gudusia chapra</i>
Pholi	<i>Notopterus notopterus</i>
Chital	<i>N. chitala</i>
Chelliah	<i>Oxygaster bacaila</i>
Anju, Debari	<i>Danio rerio</i>
Dummahree	<i>Chela</i>
Soomarah, Mola	<i>Esomus danricus</i>
Gootollah	<i>Labeo bata</i>
Kala-beinse	<i>Labeo calbasu</i>
Gandu-neenu, vincendee	<i>Labeo fimbriatus</i>
Cursa, Kurchi	<i>L. gonijs</i>
Rohu, Ruee	<i>Labeo rohita</i>
Talla maya mukni	<i>Amblypharyngodon mola</i>
Utta	<i>Chagunius chagunio</i>
Katla	<i>Catla catla</i>
mrigal, Naine mirgaal	<i>Cirrhinus mrigala</i>
Rewah, Batta, Raiya	<i>Cirrhinus reba</i>

Common Name	Latin Name
Giddi-Kooli	<i>Puntius sarana</i>
Katcha-Karawa	<i>Puntius sophore</i>
Punti, Sidhari	<i>P. ticto</i>
Gauma, Kala-batta	<i>Crossocheilus latius-latius</i>
Bucktea	<i>Botia lohachata</i>
Gunguch, Nakti	<i>Lepidocephalus guntea</i>
Bilturi, Potiah	<i>Noemacheilus botia</i>
Khorica	<i>Noemacheilus corica</i>
Dariai-tengar, Seengala	<i>Mystus aor</i>
Sutahawa-tengara, Kavasi tangara	<i>M. cavasius</i>
Ari, Naarigella	<i>M. seenghala</i>
Errajella, Tengara	<i>Mystus vittatus</i>
Puffta, Jal-Kapoor	<i>Ompok bimaculatus</i>
Boalee, Hanchi Mulley, Padhani	<i>Wallago attu</i>
Buchue, Baikri, Karhi	<i>Clarias garua</i>
Kajoli, Basanguti, Batausi	<i>Ailia coila</i>

Common Name	Latin Name
Chel-bee, Put-tach-re Abbu-Jella	<i>Pseudeutropius atherionoides</i>
Bachwa, Nandibutchua	<i>Eutropiichthys vacha</i>
Magur, Mangri	<i>Clarias batrachus</i>
Singi, Bitchukomachi, Kahreemeen	<i>Heteropneustes fossilis</i>
	<i>Gagata vitidescens</i>
Kawa, konti Kauwa	<i>Xenentodon cancila</i>
Dheridhok Chanaga	<i>Channa gachua</i>
Pu-muri, sal, Gajari, saur	<i>Channa marulius</i>
Phool-dhok, Lata Girai	<i>C. punctatus</i>
Morrul, Murl	<i>Channa striatus</i>
Chanda, chanari, Mucknee	<i>Chanda nama</i>
Range-Chanda, Laol-Chandee	<i>Chanda ranga</i>
Khalisa, cheli, Kungee, Khosti	<i>Colisa fasciata</i>
Bahn, Baam, Bami	<i>Mastacembelus armatus</i> <i>armatus</i>
Chen-da-la, Gurchee, Turi	<i>M. pancalus</i>
Aral Sand, Malga, patya	<i>Macrognathus aculeatus</i>

SNAKES IN KEOLADEO NATIONAL PARK

Common Name	Latin Name
Chamaeleon	<i>Chamaeleon calcaratus</i>
Cobra	<i>Naja naja</i>
Common blind snake	<i>Typhlops braminus</i>
Common kukri	<i>Oligodon ornensis</i>
Common wolf snake	<i>Lycodon aulicus</i>
Garden lizard	<i>Calotes versicolor</i>
Indian python	<i>Python molurus</i>
Indian rat snake	<i>Ptyas mucosa</i>
Krait	<i>Bungarus caeruleus</i>
Monitor-lizard	<i>Varanus bengalensis</i>
Bengal monitor lizard	<i>Varanus flavescens</i>
Indian spiny-tailed lizard	<i>Uromastix hardwickii</i>
Sand boa	<i>Eryx johnii</i>
Spotted cyclanor-bine turtle	<i>Lissemys punctata</i>
Russel's viper	<i>Vipera russelli</i>
Wall lizard	<i>Hemidactylus flaviviridis</i>
Fishing colubrid snake or water snake	<i>Natrix piscator</i>

TREES IN KEOLADEO NATIONAL PARK

Common Name	Latin Name
Kumudini	<i>Nymphaea nouchali</i>
Nili Kumudini	<i>N. Stellata.</i>
Pahadbel / paha dumul	<i>Cissampelos pareira</i>
Pillwani	<i>Cocculus hirsutus</i>
Wasanbel	<i>C. pendulus</i>
Nimgiloy	<i>Tinospora cordifolia</i>
Satyanashi, Pilikateri	<i>Argemone mexicana</i>
Kair or Karil	<i>Capparis decidua</i>
Heens, Jal-kaanter	<i>C. sepiaria</i>
Moreda	<i>C. zeylanica</i>
Barna	<i>Crataeva narvala</i>
Arak Pushpa	<i>Cleome gynandra</i>
Hulhul	<i>C. viscosa</i>
Kulfa	<i>Poriulaca oleracea</i>
Farash	<i>Tamarix aphylla</i>
	<i>Bergia ammannoides</i>
	<i>B. oborata</i>

Common Name	Latin Name
	<i>Abutilon bidentatum</i>
	<i>Hibiscus avalifolius</i>
Chhachh-kamdi	<i>Pavonia spp.</i>
Khareti	<i>Sida ovata</i>
Khumbasi	<i>Malva rotundifolia</i>
Khoshta	<i>Corchorus depressus</i>
Gokhru	<i>Tribulus terrestris</i>
Khatti-buti	<i>Oxalis corniculata</i>
Hingota	<i>Balanites aegyptiaca</i>
Neem	<i>Azadirachta indica</i>
Katumba, Ramchana	<i>Cayratia carnosia</i>
Ber	<i>Zizyphus mauritiana</i>
Jharber	<i>Z. nummularia</i>
Balooncreeper	<i>Cordispermum halicacabum</i>
Amaltas	<i>Cassia fistula</i>
Kesiyyasiyama	<i>C. siamea</i>
Kasondi	<i>C. occidentalis</i>

Common Name	Latin Name
Punwar	<i>c. tora</i>
Bukhan	<i>Parkinsonia aculeata</i>
Shisham	<i>Dalbergia sissoo</i>
Gulmohar	<i>Delonix regia</i>
Imli	<i>Tamarindus indica</i>
Arunj, Reonj	<i>Acacia leucophloea</i>
Babul	<i>A. nilotica</i>
Kumta	<i>A. senegal</i>
Jhanjhani	<i>Mimosa rubicaulis</i>
Birbira, Kaulasi, Goyakhair	<i>Dichrostachys cinerea</i>
Khejari	<i>Prosopis cineraria</i>
Vilayati Babul, Juliflora	<i>P. juliflora</i>
Kala Siras	<i>Albizia lebbeck</i>
Chhul-muiH	<i>Neptunia prostrata</i>
Jangal-jalebi	<i>Phtheccellobium dulce</i>
Chirmi, Gungchi	<i>Abrus precatorius</i>
	<i>Aeschynomene indica</i>
Jhojhru	<i>Crotalaria medicaginea</i>
Shalparni	<i>Desmodium gangeticum</i>
Bekar	<i>Indigofera cordifolia</i>

Common Name	Latin Name
Bekario	<i>I. hochstetteri</i>
Bekari	<i>I. linifolia</i>
	<i>Rhynchosia capitata</i>
	<i>Sesbania sesban</i>
Dhamasa	<i>Tephrosia hamiltonii</i>
Dodi	<i>Potentilla supina</i>
Bottle brush	<i>Callistemon lanceolata</i>
Jamun	<i>Syzygium cummini</i>
	<i>Amminia baccifera.</i>
	<i>A. octandra</i>
	<i>A. multiflora</i>
Mehandi	<i>Lawsonia inermis</i>
	<i>Ludwigia adscendens</i>
Singhada	<i>Trapa bispinosa</i>
Kedwi Torai	<i>Luffa acutangula</i>
Kakoda	<i>Momordica dioica</i>
Satia Leti	<i>Glinus lotoides</i>
Chirion Ka Dhania	<i>Mollugo cerviana</i>
Brahmibiuti	<i>Centella asiatica</i>
Kadam	<i>Neolamarckia cadamba</i>

Common Name	Latin Name
Kanti	<i>Acanthospermum hispidum</i>
Phutium	<i>Bidens biternata</i>
	<i>Caesulia axillaris</i>
Untkatalo	<i>Echinops echinatus</i>
Bhringraj	<i>Eclipta prostrata</i>
Baisuri	<i>Pluchea lanceolata</i>
	<i>Sonchus asper</i>
Sahadevi	<i>Vernonia cinerea</i>
Adashishi	<i>Xanthium strumarium</i>
Nilam	<i>Ageratum conyzoides</i>
	<i>Tridax procumbens</i>
Pilu, Khadiyar	<i>Salvadora oleoides</i>
Khanjar	<i>S. persica</i>
Kendu, Pasendu	<i>Diospyros cordifolia</i>
Dudhi	<i>Ichnocarpus frutescens.</i>
Aak	<i>Calotropis procera</i>
Aaksan	<i>Pergularia daemia</i>
	<i>Canscora diffusa</i>
	<i>Enicostema hyssopifolium</i>
Chhoti-kumudini	<i>Nymphoides indicum</i>

Common Name	Latin Name
Kumudini Nanhin	<i>N. cristatum</i>
Gonda, Lasora	<i>Cordia dichotoma</i>
Gondi	<i>C. gharaf</i>
Baincha, Chamror	<i>Ehretia laevis</i>
	<i>Heliotropium marifolium</i>
Amarbel, Akashbel	<i>Cuscuta reflexa</i>
Haranpadi	<i>Convolvulus arvensis</i>
Shankh pushpi	<i>Evolvulus alsinoides</i>
Nadi	<i>Creeper Ipomoea aquatica</i>
Besharm	<i>I. fistulosa</i>
Plang	<i>Rivea hypocrateriformis</i>
Dhatura	<i>Datura metel</i>
Vanras bhari	<i>Physalis minima</i>
Mokoy	<i>Solanum nigrum</i>
Ber kateri	<i>S. surattense</i>
	<i>Kickxia ramosissima</i>
	<i>Torenia bicolour</i>
	<i>Urticularia inflexa</i>
Akash neem, Neem chameli	<i>Millingtonia hortensis</i>
Pathar chatte	<i>Elytraria acaulis</i>

Common Name	Latin Name
Kiryat, Kalmegh	<i>Indoneesiella echiodoides</i>
	<i>Lepidagathis trinervis</i>
	<i>Rostellularia diffusa</i>
Arni	<i>Clerodendrum multiflorum</i>
Gamhar	<i>Gmelina arborea</i>
Bakan buti	<i>Phyla nodiflora</i>
Bhoot bhangra	<i>Leucas aspera</i>
Mundapatti	<i>L. cephalotes</i>
Van tulsi	<i>Ocimum canum</i>
Santhil	<i>Boerhavia diffusa</i>
Andhijhara	<i>Achyranthes aspera</i>
Bui kantevali	<i>Aerva tomentosa</i>
Santhi	<i>Alternanthera triandra</i>
Jangali chaulai	<i>Amaranthus spinosus</i>
	<i>Digera muricata</i>
Kasia	<i>Gomphrena celosioides</i>
Chirchita	<i>Pupalia lappacea</i>
Machechi	<i>Polygonum plebeium</i>
Nali	<i>P. glabrum</i>
	<i>P. amphibium</i>

Common Name	Latin Name
	<i>Acalypha ciliata</i>
Dudhi	<i>Euphorbia thymifolia</i>
Dudhi	<i>E. hirta</i>
	<i>Phyllanthus virgatus</i>
Salepan, Chamaria, Dho	<i>Securinega leucopyrus</i>
Makhi, Kamboi	<i>Kirganelia reticulata</i>
Bargad	<i>Ficus benghalensis</i>
Gular	<i>F. recemosa</i>
Pipal	<i>F. religiosa</i>
Sahut	<i>Morus alba</i>
Churel, Papdi	<i>Holoptelia integrifolia</i>
	<i>Ceratophyllum demersum</i>
	<i>Hydrilla verticillata</i>
Sewla bans	<i>Vallisneria spiralis</i>
Rambans	<i>Agave wightii</i>
Naharkanta, Satavar	<i>Asparagus racemosus</i>
Kan kawwa	<i>Commelina benghalensis</i>
Jal kumbhi	<i>Eichhornia crassipes</i>
Pola	<i>Juncus bufonius</i>
Aira, Patera	<i>Typha angustata</i>

Common Name	Latin Name
Chowpatti	<i>Lemna paucicostata</i>
Chowpatti	<i>Spirodela polyrhiza</i>
	<i>Wolffia arrhiza</i>
	<i>Sagittaria sagittifolia</i>
	<i>Najas graminea</i>
	<i>Naias minor</i>
	<i>Potamogeton crispus</i>
	<i>P. pectinatus</i>
	<i>Cyperus iria</i>
Motha	<i>C. bulbosus</i>
	<i>C. sgarrosus</i>
	<i>c. michelianus</i>
	<i>Fimbristylis tenera</i>
	<i>Scirpus roylei</i>
	<i>Acrachna racemosa</i>
	<i>Alloteropsis cimicina</i>
Bhanjura, Polarda	<i>Apluda mutica</i>
Lapla	<i>Aristida hystric</i>
Lapla	<i>Aristida quartinianus</i>
Karad	<i>Bothriochloa pertusa</i>

Common Name	Latin Name
Kuri	<i>Brachiaria ramosa</i>
Anjan, Dhaman	<i>Cenchrus ciliaris</i>
Kali-Dhaman, Bhurat	<i>Cenchrus setigerus</i>
Bamna, Sender	<i>Chloris dolichostachya,</i>
Kali Charkali	<i>c. barbata</i>
Coonder	<i>Cymbopogen jwarancusa</i>
Dub Hariyali	<i>Cynodon dactylon</i>
Ganthia	<i>Dactyloctenium sindicum</i>
Dab/Kush	<i>Desmostachya bipinnata</i>
Zada	<i>Dicranthium annulatum</i>
Badi Jarga	<i>D. coricosum</i>
Chinkarda	<i>Digitaria adscendens</i>
	<i>D. cruciata</i>
Sawan	<i>Echinochloa cokmum</i>
Jhania	<i>Eleusine Indica</i>
Jondali	<i>Eragrostiella bifaria</i>
Pan ghas	<i>Eragrostis ciliaris</i>
Kiwi	<i>E. pilosa</i>
	<i>E. tenella</i>
Buhari	<i>Eramopogon foveolatus</i>

Common Name	Latin Name
	<i>Hackelochloa granularis</i>
Surwala	<i>Heteropogon contortus</i>
Siru	<i>Imperata cylindrica</i>
Gandhel	<i>Iseilema prostratum</i>
	<i>Melanocenchrus jacquemontii</i>
Susa chunti	<i>Oropetium thomaeum</i>
Dhan	<i>Oryza sativa</i>
	<i>Oplismenus undulatifolius</i>
Bansi	<i>Panicum coloratum</i>
Kodo	<i>paspalidium flavidum</i>
Kadra	<i>paspalum scrobiculatum</i>
Siyipoonchha	<i>perotis indica</i>
	<i>Rottboellia exaltata</i>
Munj	<i>Saccharum bengalense</i>
Kans	<i>S. spontaneum</i>
Bindar	<i>Setaria glauca</i>
	<i>S. pallide fusca</i>
Barru	<i>Sorghum halepense</i>
	<i>Sporobolus helvolus</i>
	<i>s. marginatus</i>

Common Name	Latin Name
Sitaghas	<i>Tragus biflorus</i>
Khus	<i>Vetiveria zizanioides</i>

SECTION 13

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