Rahul Bhatnagar
IFS
Chief Conservator of Forests
Wildlife, Udaipur

ACKNOWLEDGMENTS

Life can be dated back on Mother Earth for more than 3.5 billion years. Many of the biological resources provided by the nature are those products that we simply harvest from these resources and they fall into several categories like food, fodder, fuel, medicines and much more. Since the beginning of life, over 95% of the species that had ever existed have become extinct over the period of time. But why are we so concerned now about the present extinction rates? The answer to this is the fact that in the earth's history, for the first time, a single species, Homo sapiens, could be a cause for mass extinction that may lead to its own destruction.

Birds are the best ecological service providers and recognized as good bio-indicators of the quality of ecosystems and health of the environment. Ecosystem services are processes provided by nature that support human life. These services include the decomposition of waste, pollination, water purification, moderation of floods, and renewal of soil fertility. Ecosystem processes are often overlooked, and are not generally valued as part of the economy until they cease to function. Birds have been used recently to monitor Environmental Impact Assessment (E.I.A), because they are very sensitive to environmental changes. Birds also fascinate us and function as the stress busters of modern times.

Udaipur region has a very good biodiversity. As there are many water bodies in and around Udaipur such as Fateh Sagar, Pichhola, Badi, Menar, Nagawali with Bhatewar, Kishan kareri, Badwai and Mangalwar (falling in Chittorgarh district), these form the heaven for resident as well as migratory birds.

It gives me immense pleasure that Udaipur Bird Festival is now entering into its fourth year. This festival attracts a lot of people all over the country. The enthusiastic residents of the city including the school children and senior citizens participate in this three day event. This year an additional event of 'Bird Race' has also been introduced. The purpose of organizing this event is to generate awareness towards conservation of nature and its resources.

I take this privilege to acknowledge here the sincere efforts put in by city people, students, researchers, partners, professionals, armed forces, electronic and print media, organizations, our Pakshi Mitra, members of Eco Development Committees and village Forest protection and management committees, NGOs and all who have contributed to organize 'Udaipur Bird Festival' and to bring this souvenir in existence.

I extend my sincere thanks to Dr Asad RehamaniSaheb ,Sh Vikram Singh,IAS (Retd}, Dr. Satish Sharma, RFS (Retd), Shri Akshay Singh, IFS, CCF, Udaipur, Shri I.P.S. Matharu, IFS, CF, Udaipur, Mrs Harini. V, IFS, Shri Suhail Majboor RFS, Shri Shaitan Singh Deora RFS, Shri V.S. Rana, RFS (Retd.), Shri P.S. Choondawat RFS (Retd.), Shri Kamlesh Sharma, Shri Pradeep Sukhwal, Shri Vinay Dave, Dr. Chhaya Bhatnagar, Dr. Vijay Kumar Koli, Dr. Nadim Chisty, Shri Ankit Sisodia, Shri Sharad Agrawal, Shri Arun Soni, WWF, Shri Anil Rodgers, for deep involvement in every step of planning and execution of the tasks in field. I extend my gratitude to the involved photographers and experts who have contributed their photographs and articles for the souvenir and exhibition during the festival.

I also extend my sincere thanks to Geetanjali Group of Industries, Vedanta, RK Marbles, WWF India and Maharana Mewar Charitable Trust for financial support. I would like to express my indebtedness to the Commanding Officer of Eklingarh Cantonment Udaipur and their team of army personnel for the support and cooperation extended in the form of material and man power.

This mammoth program could have never been a success without the untiring team efforts of my colleagues, all officers and personnel of forest department who had always remained available on single call for this festival. My sincere thanks to all those whom I have not been able to name here, but their contribution has, nonetheless, been not less significant than others.

Rahul Bhatnagar

वसुन्धरा राजे
मुख्यमंत्री
राजस्थान

संदेश

प्रसन्नता का विषय है कि वन और पर्यटन विभाग, राजस्थान के संयुक्त तत्वावधान में झीलों की नगरी उदयपुर में बर्ड फेस्टिवल 2017–18 का आयोजन किया जा रहा है।

पक्षियों की विभिन्न प्रजातियों को देखना और उनके बारे में जानना एक रोचक अभिरूचि है। ऐसे में इस तरह के बर्ड फेस्टिवल के आयोजन से आम लोगों को पक्षियों के बारे में अधिक जानकारी प्राप्त करने का अवसर मिलता है। पक्षियों के प्रवास, उनकी आदतें और पारिस्थितिकी तंत्र पर पड़ने वाले प्रभाव की जानकारी प्रदान करने से पक्षियों के संरक्षण को बढ़ावा मिलता है। साथ ही इस तरह के आयोजन से पर्यटन को भी बढ़ावा मिलता है।

आशा है कि जल संरक्षण के लिए विख्यात उदयपुर बर्ड फेस्टिवल के लिए एक आदर्श स्थान सिद्ध होगा। मैं उदयपुर बर्ड फेस्टिवल के सफल आयोजन के लिए बधाई और शुभकामनाएं देती हूँ।

(वसुन्धरा राजे)

गुलाब चन्द कटारिया
मंत्री
गृह एवं न्याय, गृह रक्षा एवं नागरिक सुरक्षा, जेल,
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संदेश

मुझे यह जानकर अत्यंत प्रसन्नता हो रही है कि **''उदयपुर पक्षी मेला''** अपने स्वरूप में अभिवृद्धि करते हुये अब **''उदयपुर पक्षी पर्व''** का रूप लेकर अपने चौथे वर्ष में पदार्पण कर चुका है। वन विभाग का यह आयोजन न केवल संभाग में बल्कि राज्य एवं राज्य से बाहर भी लोकप्रिय होता जा रहा है। राज्य एवं राज्य के बाहर के कई पक्षी प्रेमी व विशेषज्ञ इसमें भाग लेकर वन्यजीव संरक्षण को प्रभावी एवं व्यापक बनाने में सराहनीय भूमिका निभा रहे हैं। यह इसकी सफलता व लोकप्रियता का द्योतक है।

उदयपुर शहर एवं संभाग अपनी झीलों व जलाशयों के लिए जाना जाता है। जलाशयों में पक्षियों की विविधता उनको और भी जीवन्त बना देती है। जलाशयों के पक्षियों व जलीय जैव विविधता का संरक्षण–संवर्द्धन तब ही संभव है जब स्थानीय लोग जागरूक हो। **''उदयपुर पक्षी पर्व''** आम जन को जागरूक बनाने का सशक्त माध्यम है।

यह आयोजन निःसंदेह एक सराहनीय पहल है। मैं इस आयोजन की सफलता के लिए हार्दिक शुभकामनाऐं एवं बधाई प्रेषित करता हूँ।

(गुलाब चन्द कटारिया)

Gajendra Singh
Minister of Forests
Environment, Sports and Youth Affairs
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MESSAGE

I feel happy to know that the Department of Forests and the Department of Tourism is organizing the fourth edition of "Udaipur Bird Festival" this year in Udaipur, the city of lakes.

It is indeed a matter of great pleasure that with the objective of creating awareness among the masses in the state in general and to promote bird centric tourism in southern Rajasthan in particular, this mega birding event is being organized. I hope this birding event shall provide an opportunity to bird lovers and common public to learn more about the vast avian diversity of the state. Definitely such birding events would also help promote eco-tourism, a responsible travel to appreciate nature.

I send my best wishes and greetings to the organizers and participants. Overall, I wish the event a great success.

(Gajendra Singh)

Ashok Jain
Chief Secretary
Government of Rajasthan
Government Secretariat, Jaipur - 302005

MESSAGE

I am happy to know that the Department of Forest, in collaboration with the Department of Tourism, is organizing the "Udaipur Bird Festival, 2017-18" from December 23rd to 25th, 2017.

It is praiseworthy that the Department is organizing this birding event for the fourth consecutive year and I hope that it becomes a regular annual event for all times to come.

Udaipur showcases a unique combination of lakes dominated landscape alongside a rich historical and cultural heritage. I am of the opinion that holding such events at Udaipur will open new vistas for traditional tourists while introducing fresh leaves to the book of ecotourism in Rajasthan.

I hope the Souvenir proposed to be released on this occasion will render an insight to a vibrant spectrum of flora and fauna, with special emphasis upon the avian species, of the region.

I compliment the organizers for their dedicated efforts and wish the event a grand success.

(Ashok Jain)

Nihal Chand Goel
Additional Chief Secretary
Forest, Environment
Govt. of Rajasthan
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MESSAGE

It gives me immense pleasure to know that the department of Forest and the Department of Tourism are jointly organizing the fourth edition of **"Udaipur Bird Festival"** in the city of lakes.

Udaipur, with all its lakes, is an ideal location for conducting birding events, such as Bird Festival. Apart from raising awareness of its rich birdlife and the need to protect their habitat, such birding events would also help promote bird centric tourism in the area. The new event "Bird Race" is a welcome addition to the festival this year, whereby interested bird watchers and nature lovers are being provided an extra platform for documenting the avian diversity of the area.

I send my best wishes and greeting to the organizers and the participants of the event. I wish the event a great success.

(Nihal Chand Goel)

ए.के.गोयल
आई.एफ.एस.
प्रधान मुख्य वन संरक्षक (हॉफ), राजस्थान

MESSAGE

यह निश्चय ही हर्ष का विषय है कि गत वर्षो की भांति उदयपुर में इस बार भी भव्य पक्षी पर्व का आयोजन किया जा रहा है। वर्ष 2014 में पक्षी पर्व के प्रथम संस्करण ने भी अपनी प्रभावी छाप छोड़ी थी और लगातार ख्याति प्राप्त करते हुये अब यह अपने चतुर्थ संस्करण में पहुॅच चुका है। इस बार के आयोजन में ''बर्ड रेस'' नाम से एक अतिरिक्त आयोजन भी पक्षी पर्व का मुख्य आकर्षण रहेगा, ऐसा मेरा विश्वास है।

उदयपुर संभाग में विशाल फैलाव वाली अनेक सुन्दर झीलें विद्यमान है जिनमें कई ''महत्वपूर्ण पक्षी स्थल'' (Important Bird Areas) के रूप में पहचानी जाती हैं। उदयपुर शहर का झील संकुल भी एक ''महत्वपूर्ण पक्षी स्थल'' के रूप में दर्ज है एवं इन झीलों के किनारे पक्षी पर्व का आयोजन उनके नाम एवं महत्व को सार्थक व उजागर तो करता ही है संभाग में पारिस्थितिकी पर्यटन को भी नये आयाम देता है।

इस आयोजन में स्थानीय जन मानस के अलावा राज्य व देश के अन्य भागों से पक्षी प्रेमी व विशेषज्ञ पहुॅचते रहे हैं। आशा है कि इस बार भी यह सिलसिला नई ऊँचाइयां छुयेगा।

मैं पक्षी पर्व आयोजकों के प्रयासों की प्रशंसा करता हूॅ एवं 23 से 25 दिसम्बर, 2017 तक आयोजित होने वाले इस पर्व की अपार सफलता के लिये शुभकामनायें देता हूॅ।

(ए.के. गोयल)

Dr. G.V. Reddy
IFS
Addl. Principal Chief Conservator of
Forests and Chief Wildlife Warden
Rajasthan, Jaipur

MESSAGE

Birds are inalienable part of evolutionary process and intimate part of our ecosystems, providing aesthetic, cultural and ecosystem services. Being the tertiary consumers they are at the apex of food pyramid, thus the best indicators of health of the ecosystem. The spread of DDT into the ecosystem was recognized through decline in American Bald Eagle. Similarly spread of Diclofenac in Indian sub-continent was recognized through abrupt decline in Vulture population. Birds are the most friendly wildlife in neighborhood available almost in all habitats. They are the first wild friends of children. Birds inspired the humans to fly.

Awareness about the birds is the most important step in better conservation. Bird Fairs bring in experts to help the novice to pick-up the skills to identify the migratory and rare birds. Udaipur Wildlife Circle has been pioneer in organizing and popularizing bird fairs in the state and developed lot of enthusiasm amongst the school children, youth and adults. These bird fairs are quite popular in the Mewar region and other districts have also started organizing their own Bird Fairs. The bird fair in Udaipur has helped us in mobilizing the resources for creating exclusive bird park in Udaipur, which will be first of its kind in the state and will be of international standards.

The Udaipur circle efforts are commendable and I appreciate the whole hearted support of the local administration, senior citizens and bird enthusiasts of Udaipur region. My best wishes for the event and wish that such bird fairs will continue to flourish.

(Dr. G.Viswanatha Reddy)

Ravi Singh
Secretary General & C.E.O.
WWF-India, New Delhi

MESSAGE

WWF-India congratulates the Rajasthan Forest Department, the Udaipur Wildlife Circle and other organizers of the Udaipur Bird Festival for creating this unique platform for birding enthusiasts and birders to visit and appreciate bird habitats around the city and district. Over the years the festival has matured into a valuable experiential learning tool that will go a long way to garner public support in protecting birds and their habitat. Birds, with their beauty and diversity of form, calls and colour, have fascinated and inspired human art and poetry since time immemorial. Birds are valuable pollinators of fruit and food plants and significant contributors to the forests. Their aerodynamic form and evolved navigational skills have inspired aviation technologies which have transformed our lives. The Mewar region, including Udaipur, with its unique geographical features, its wetlands and designated Important Birding Areas is an ideal venue for this event. While it is important to enjoy and learn at the festival, we hope that participants also imbibe the norms of good bird watching practices and respect the birdlife and other fauna and flora that the Forest department works hard to preserve. We must applaud the teams bringing the event together, for this has conservation awareness values and helps promote local livelihoods and tourism activities year after year.

My best wishes for the Festival.

(Ravi Singh)

BIRD FAIR MOVEMENT IN RAJASTHAN

Vikram Singh, IAS (Retd.)

Birds are the most attractive, colorful, active and interesting forms of the life that nature has bestowed upon us. No wonder, bird watching has established itself as one of the world's fastest growing hobbies. Access to digital photography, phone cameras, social media, e-books and various wonderful apps have greatly contributed in enhancing this captivating engagement.

Fairs are essential part of our life's celebrations and Bird Fairs are no different ! Bird Fairs not only celebrate the wonders of the avian world but also bring into focus the various issues related to them - most importantly our inter-relationship with them and their conservation aspects. Looking at the larger picture, Bird Fairs promote conservation of nature in general and wildlife in particular which is absolutely essential to our own existence.

The annual British Bird Watching Fair held at Rutland, Leicester, UK is the oldest such event in the world. It has just turned 29 in August, 2017. The Fair is organized by the Royal Society for the Protection of Birds (RSPB) in partnership with BirdLife International etc. and supports protection and conservation of birds and their habitats.

Interestingly, the Indian Bird Fair being organized at Man Sagar (Jal Mahal), Jaipur is only second to it and has already completed 20 glorious years in 2017. It is organized by a consortium of conservation organizations led by the Tourism and Wildlife Society of India (TWSI) which is being ably piloted by Sh. Harsh Vardhan through his unfailing and tireless efforts since its inception.

Taking cue from this, I initiated the first Dungarpur Bird Fair in 2013 when I was posted there as Collector and District Magistrate. It is most satisfying to note that due to the efforts of a very dedicated and committed team, the tradition is still being continued and its 5th Edition is being organized on 9th January, 2018. I am delighted to report that the small initiative we took at Dungarpur seems to have set the ball rolling for organizing Bird Fairs at various locations in the State.

Due to the unstinted support of Sh. Rahul Bhatnagar (IFS), CCF Wildlife, the Udaipur Bird Festival was initiated in the year 2014. It is most heartening to note that its 4th Edition is coming up on 22-25 December, 2017 and the event is growing in popularity and coverage with each passing year. The first Bird Race being organized this year is the newest attraction being initiated in Rajasthan. We are grateful to Dr. Asad Rahmani for this value addition and his continued guidance for the Festival.

Bird Fairs have also been organized at Bharatpur (Keoladeo Ghana), Alwar (Sariska) and Karauli and more recently at a number of venues in Bhilwara, Dausa, Ajmer, Kota, Jhalawar, Jodhpur and Bikaner etc. It has indeed become a notable movement in Rajasthan with a large number of people and organizations getting involved in them at different locations.

A Bird Park (Aviary) is soon coming up at the Gulab Bagh, Udaipur. It will generate and further increase the interest about birds in the region. A breeding centre for green avadavat (green/tiger munia) is also being planned for saving this remarkable bird which is fast losing its territories due to destruction of its habitat. It is envisaged that the establishment of the Bird Park will create a permanent forum for the bird enthusiasts of the entire region. It will take up scientific studies and research work on the various aspects of bird life and would serve as a resource centre for conservation of birds and their habitats. Documentation and record keeping are of utmost importance in these endeavors.

A new tourism product has been created in the shape of Bird Fairs. Now it is for the Tourism Department and private players to make use of this opportunity to promote tourism in the entire State - especially in South Rajasthan which is so well endowed naturally and is mostly tribal where employment opportunities are limited.

South Rajasthan is endowed with numerous water bodies and forests. It harbours about 400 wonderful bird species including such amazing varieties as the green avadavat, lesser florican, saras crane and black necked stork. This winter (2017-18), our efforts have been to organize Bird Fairs in the entire South Rajasthan i.e. in the Udaipur Division (Comprising of Udaipur, Dungarpur, Banswara, Rajsamand, Chittorgarh and Pratapgarh districts) and also in Bhilwara and Sirohi districts.

The Bird Fair movement is indeed growing and sky is the limit. So Happy Birding !!!

Note: The author is a wildlife enthusiast and a keen birder. He has been instrumental in organising bird fairs at Dungarpur, Bharatpur, Udaipur and Karauli.

KITE FESTIVAL AND BIRDS

Chhaya Bhatnagar
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India is the land of biodiversity in true sense. There is not only a wide range of ecosystems, habitats, flora and fauna but also of languages and dialects, religions and customs, cultures, literatures, beliefs and festivals spread over from east to west and from north to south. Among various festivals being celebrated all over the country, kite festival is a unique one. At places, especially in the states of Rajasthan and Gujarat, the sky is filled with kites of various shapes, colors, messages and styles from dawn to dusk. The roof-tops are crowded and people enjoy enthusiastically with food supplies being arranged on terraces for the whole day. Age is no bound for kite flyers. In north India, kites are flown on the occasion of Uttarayan (or Makar Sankranti) or on Vasant Panchmi.

Unfortunately, there is a darker side to this fun and frolic. During this festival, when the sky is loaded with numerous kites soaring high and high, many innocent birds become the victim of butchery, bloodshed and death. The kites are flown with one end of thread tied to it while the other end remains in the hands of kite flyers. This cotton thread has been replaced with nylon manjha over a period of time. The manjha is also made up of well ground or powdered glass coated on the cotton thread with the help of glue, thus making it razor sharp. Birds flying in the sky cannot see these fine strings and they get entangled and are inflicted with deep wounds. Several birds get their wings slashed or have fractures and dislocations or nerve injuries which lead to lifetime impairments. Sometimes there is complete amputation of wing. Urban birds like pigeons, rose-ringed parakeets, pariah kites etc. are the most commonly injured birds noticed. Other birds reported to be injured include Peafowls, Eagles, Falcons, occasionally Sarus cranes, etc. The impact of kite festival on vultures is of great concern as these are important ecological service providers and are already endangered all over the globe.

The local and migratory birds such as ibises, flamingoes, lapwings and pelicans and many species of ducks and geese, such as comb duck and bar-headed geese get seriously injured. The white-rumped vultures lay their eggs and the hatchlings emerge almost in the same period in January. The parents in search of food get entangled and injured and the fledglings are left starved in their nests thus double folding the death toll. The increasing number of kites each year, the competitive spirit in kite fighting among flyers and increase in use of dangerous manjha has made the situation grave for these flying creatures. After the festival is over, the manjha can be seen hanging among the boughs of trees, lamp posts and other structures that serve as perching sites for these birds. Thus the misery for the avian creatures is not limited for a single day.

What can be done…..

The general awareness campaign should be launched at a large scale targeting the school children and adults alike. The harm caused to birds should be narrated to public with emphasis to the fact that pleasure should not be drawn on the cost of lives of birds. Following strategies can be fruitful in sensitizing the mass:

1. A team of volunteers can be made that shall draw the attention of the mass towards the disastrous consequences of use of manjha among kite flyers.
2. Media persons can be asked to communicate the message of conservation through print and electronic media.
3. Message can be transmitted through social networking sites which are sensitive to birds.
4. Vendors can be asked not to sell manjha and more emphasis be laid on use of cotton thread.
5. Signages and posters can be put up at important places and locations giving the message of conservation and pleading the mass regarding disuse of manjha in the interest of birds.
6. Sensitization campaigns can be undertaken in schools and colleges to motivate young minds for conservation.
7. A team of volunteers can be prepared to rush to the spot to rescue the birds and provide proper treatment to it.
8. Candle march and signature campaigns can also help in generating awareness.
9. Evening and morning kite flying should be banned as this is the time when birds remain most active and became more prone for accidents.

Non-Winter Movements of Birds In Southern Region of Rajasthan (India)

Dr. Satya Prakash Mehra & Dr. Sarita Mehra
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Alike a human event of bird festival, migration is one of the annual events of nature. Migration is one of the most striking features of birds through which the species tend to take the advantage of global differences of seasonal temperatures as well as optimizing availability of food sources and breeding habitat. Annual long distance migration is undertaken by many species which are characterized by a breeding season spent in the temperate or arctic/ antarctic regions and a non-breeding season in the tropical regions or opposite hemisphere. These long migrations are usually triggered by the length of daylight and weather conditions. Some bird species undertake shorter migrations, travelling only up to a distance required to avoid bad weather or to obtain food. Few species also show partial migration associated with the food availability and altitudinal migration triggered by temperature changes.Every year about 40% (approx. 4,000) bird species of the world show regular migration. The migration generally takes place from north to south in autumn (September to November) whereas south to north in spring (March to May). Winter migration is well known to the common mass but summer migration which takes place in spring from the south to breed and to spend summer, return with their young ones in autumn.

Tropical regions of the world have annual cycles of wet and dry seasons, for example monsoons of our region. Further, tropical region has little variation in the length of day throughout the year with an adequate supply of food. Therefore, most species are resident. The Indian winter which is full of the resources after a period of monsoon, is more convenient for the bird-life than a parched summer. The few species that fall under the category of Summer Visitors are more-or-less confined to the northwestern parts, where they are able to take a route round the head of the Arabian Gulf to winter in Africa. Species such as cuckoos with a breeding status in India spends the non-breeding season in Africa. However, rainfall also forces some tropical species to undergo movements of varying distances. If they are late arrivals, they are dependent on monsoon conditions for their food-supply and are known as Rains visitors. But both Summer and Rain visitors, are species which are residents of farther south in India, i.e., they are merely summer visitors in the northern part of their range in India. Geographical position and physical features, therefore, combine to account for one of the chief ornithological characteristics of India that the country is practically without summer visitors from beyond its borders.

Southern Rajasthan has the diversity of birds which counts near about 350 species. More than 100 species are migrants, mostly winter migratory. Unlike winter migration, sometimes journeys are not considered "true migration" due to its non-periodicity of movement, causes and patterns. These are mostly associated with the nomadic movements in the summer and monsoon period. Species belonging to 23 families show their non-winter movements or could be assigned as local migratory or nomadic summer visitors for the area below 800msl from the southern parts of Rajasthan which include whole of the Udaipur Region and parts of Jodhpur Region (Jalore, Pali, Sirohi). The status of bird species has been excluded for habitats above 800msl which include Abu Hills and Kumbhalgarh Hills. The micro-climatic conditions of the two sites have great variation than the foothill areas, and the species from these two sites show altitudinal or vertical movements.

The species listed as the summer migratory species for the southern Rajasthan are based on the observations carried out from 2004 to 2011 (Mehra, 2011) along with the distributional status given by the work of Ali & Ripley (1987). The time period of movements within or through the area under investigation considered for non-winter movements is after March lasting with the onset of winters at the end of September.

Table 1: Nomadic non-winter / summer visiting avifaunal species of South Rajasthan region excluding altitudinal sites of >800msl (Abu Hills & Kumbhalgarh Hills)

Group (Family)	**Species (**Numbers given to species in Ripley's (1982) *Synopsis,* which was also followed in Ali & Ripley's *Handbook***)**
Bitterns (Ardeidae)	Yellow Bittern (57), Chestnut/ Cinnamon Bittern (56), Black Bittern (58)
Flamingos (Phoenicopteridae)	Greater Flamingo (73), Lesser Flamingo (74)
Quails (Phasianidae)	Rain Quail (252)
Buttonquails/ Bustardquails (Turnicidae)	Small Buttonquail (313), Yellow-legged Buttonquail (314-315), Common/ Barred Buttonquail (316-319)
Bustards (Otididae)	Lesser Florican (357)

Painted-Snipes (Rostratulidae)	Greater Painted-Snipe (429)
Lapwings (Charadriidae)	Yellow-wattled Lapwing (370)
Stone-Plovers/Thick-knees (Burhinidae)	Great Stone-Plover/ Great Thick Knee (437)
Coursers & Pratincoles (Glareolidae)	Indian Courser (440), Small Pratincole (444)
Sandgrouse (Pteroclididae)	Chestnut-bellied Sandgrouse/ Indian Sandgrouse (487)
Cuckoos, Malkohas & Coucals (Cuculidae)	Pied Crested Cuckoo (570-571), Common Hawk-Cuckoo/ Brainfever Bird (573-574), Grey-bellied Cuckoo/ Indian Plaintive Cuckoo (584), Asian Koel (590-592)
Nightjars (Caprimulgidae)	Grey/ Indian Jungle Nightjar (670-672a), Common Indian Nightjar (680-681), Savanna/ Franklin's Nightjar (682)
Bee-eaters (Meropidae)	Blue-cheeked Bee-eater (747), Blue-tailed Bee-eater (748)
Rollers (Coraciidae)	European Roller (754)
Hoopoes (Upupidae)	Common Hoopoe (763-766)
Pittas (Pittidae)	Indian Pitta (867)
Larks (Alaudidae)	Black-crowned Sparrow-Lark (879), Common Crested Lark (898-900), Sykes's Crested Lark (902), Oriental/ Eastern Skylark (904-909)
Swallows (Hirundinidae)	Red-rumped Swallow (923-928)
Cuckoo-Shrikes, Woodshrikes (Campephagidae)	Large Cuckoo-Shrike (1072-1075), Large Woodshrike (1067-1068)
Paradise-Flycatchers (Monarchinae)	Asian Paradise-Flycatcher (1460-1464)
Finches (Fringillidae)	Common Rosefinch (2010-2013)

Source

Ali, S. & Ripley, S. D. (1987).Compact Handbook of the Birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka.Oxford University Press, Delhi.

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Winter Migratory Birds of Southern Rajasthan

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Migration is the process in which selective pressures act on individuals to move at precise times and in specific orientation that serves as the common denominator across the phyla. Migration can be well defined as a regular movement between the geographically separated areas. Two types of migration have been identified:

- **Obligate migration:** This is considered 'hard-wired', in that the bird seems pre-programmed to leave its breeding area at a certain time each year. Timing, direction and distances in this type of migration are relatively constant from year to year. This type of migration is found in both short-distance and long-distance migrants, but mostly in the second.
- **Facultative migration:** This is considered optional, occurring in response to conditions at the time. Individuals may migrate in some years but not in other (depending on weather condition).

The presence of a bird in a particular area indicates that either the bird is local resident in that area or it has come as a visitor and shall leave after passing a certain period of time. Accordingly, the birds can be categorized as:

- Resident (R): Those found regularly throughout the entire year.
- Winter visitor (WV): Those found only during the winter season.
- Summer visitor (SV): Those found only during the summer season.
- Transient visitants (TV): Those found only during the migrations, in spring and fall.

The southern part of Rajasthan, commonly known as the "Mewar" region,comprises of six districts, namely, Udaipur, Rajsamand, Dungarpur, Banswara, Pratapgarh, and Chittorgarh, covering about 12.35% of the geographical area of the state. This part is situated in the world's oldest mountains, the Aravalli Ranges, and contains many seasonal and perennial water bodies. These wetlands provide an excellent habitat and harbor many aquatic species particularly in winter season when all water bodies are filled with migratory birds.

A number of studies (Sharma and Tehsin 1994, Sharma 1998, Bhatnagar et al. 2007, Yaseen et al. 2011a, 2011b, 2011c, Koli et al. 2013, Mehra and Mehra 2013) have been done in southern Rajasthan and a total of 90 species were identified as winter migratory to this area, wherein 33 species are terrestrial birds, 45 species are water birds and 12 species are water dependent species. All reported migratory birds in south Rajasthan are enlisted in the Table 1, 2 and 3.

Table 1. List of winter migratory terrestrial birds of southern Rajasthan ("+" = presence reported and "-" = presence not reported).

S. no.	Common name	Scientific name	Udaipur	Dungapur	Banswara	Pratapgarah	Chittorgarh	Reference
1.	Lesser Kestrel	*Falco naumanni*	+	-	-	-	-	1
2.	Common Kestrel	*Falco tinnunculus*	-	-	-	+	-	5
3.	Oriental Turtle-Dove	*Streptopelia orientalis*	+	-	-	-	-	1
4.	Rufous-tailed Shrike	*Lanius isabellinus*	+	-	-	+	-	1,5
5.	Brown Shrike	*Lanius cristatus*	+	-	-	-	-	1
6.	Blue Rock-Thrush	*Monticola solitarius*	+	-	-	+	-	1,5
7.	Siberian Rubythroat	*Luscinia calliope*	+	-	-	-	-	1
8.	Bluethroat	*Luscinia svecica*	+	-	-	+	-	1,5
9.	Black Redstart	*Phoenicurus ochruros*	+	-	-	+	-	1,5
10.	Common Stonechat	*Saxicola torquata*	+	-	-	+	-	1,5
11.	Pied Bushchat	*Saxicola caprata*	+	-	-	+	-	1,5
12.	Variable Wheatear	*Oenanthe picata*	+	-	-	+	-	1,5

13.	Desert Wheatear	*Oenanthe deserti*	+	-	-	+	-	1,5
14.	Isabelline Wheatear	*Oenanthe isabellina*	+	-	-	+	-	1,5
15.	Indian Great Reed-Warbler	*Acrocephalus stentoreus*	+	-	-	+	-	1,5
16.	Common Chiffchaff	*Phylloscopus collybita*	+	-	-	+	-	1,5
17.	Olivaceous Leaf-Warbler	*Phylloscopus griseolus*	+	-	-	-	-	1
18.	Hume's Warbler	*Phylloscopus humei*	+	-	-	+	-	1,5
19.	Greenish Leaf-Warbler	*Phylloscopus trochiloides*	+	-	-	-	-	1
20.	Common Lesser Whitethroat	*Sylvia curruca*	+	-	-	+	-	1,5
21.	Red-throated Flycatcher	*Ficedula parva*	+	-	-	+	-	1,5
22.	Ultramarine Flycatcher	*Ficedula superciliaris*	+	-	-	+	-	1,5
23.	Verditer Flycatcher	*Eumyias thalassina*	+	-	-	-	-	1
24.	Grey-headed Canary-Flycatcher	*Culicicapa ceylonensis*	+	-	-	+	-	1,5
25.	Common Rosefinch	*Carpodacus erythrinus*	+	-	-	+	-	1,5
26.	Grey-headed Starling	*Sturnus malabaricus*	+	-	-	-	-	1
27.	Rosy Starling	*Sturnus roseus*	+	-	-	+	-	1,5
28.	Ashy Drongo	*Dicrurus leucophaeus*	+	-	-	-	-	1
29.	Red-breasted flycather	*Muscicapa parva*	-	-	-	-	+	4
30.	Common Quail	*Corurnix coturnix*	-	-	-	+	-	5
31.	Wryneck	*Jynx torquilla*	-	-	-	+	-	5
32.	Tawny Pipit	*Anthus campestris*	-	-	-	+	-	5

Table 2. List of winter migratory water birds of southern Rajasthan ("+" = presence reported and "-" = presence not reported).

S. no.	Common name	Scientific name	Udaipur	Dungapur	Banswara	Pratapgarah	Chittorgarh	Reference
1.	Great Crested Grebe	*Podiceps cristatus*	+	+	+	-	-	1
2.	Great White Pelican	*Pelecanus onocrotalus*	+	+	+	-	-	1
3.	Dalmatian Pelican	*Pelecanus crispus*	+	+	+	-	-	1
4.	Grey Heron	*Ardea cinerea*	+	+	+	+	-	1,5,6
5.	Glossy Ibis	*Plegadis falcinellus*	+	+	+	-	-	1
6.	Greater Flamingo	*Phoenicopterus ruber*	+	+	+	+	-	1,5,6
7.	Lesser Flamingo	*Phoenicopterus minor*	+	+	+	-	-	1
8.	Bar-headed Goose	*Anser indicus*	+	+	+	+	-	1,5
9.	Brahminy Shelduck	*Tadorna ferruginea*	+	+	+	+	-	1,5,6
10.	Gadwall	*Anas strepera*	+	+	+	+	-	1,5
11.	Eurasian Wigeon	*Anas penelope*	+	+	+	+	-	1,5
12.	Mallard	*Anas platyrhynchos*	+	+	+	+	-	1,5,6
13.	Northern Shoveller	*Anas clypeata*	+	+	+	+	-	1,5,6
14.	Northern Pintail	*Anas acuta*	+	+	+	+	-	1,5,6
15.	Garganey	*Anas querquedula*	+	+	+	-	-	1

16.	Common Teal	*Anas crecca*	+	+	+	+	-	1,5,6
17.	Red-crested Pochard	*Rhodonessa rufina*	+	+	+	-	-	1
18.	Common Pochard	*Aythya ferina*	+	+	+	+	-	1,5,6
19.	Ferruginous Pochard	*Aythya nyroca*	+	+	+	-	-	1
20.	Tufted Pochard	*Aythya fuligula*	+	+	+	+	-	1,5
21.	Common Crane	*Grus grus*	+	+	+	+	-	1,5
22.	Common Coot	*Fulica atra*	+	+	+	-	-	1
23.	Kentish Plover	*Charadrius alexandrinus*	+	+	+	+	-	1,5,6
24.	White-tailed Lapwing	*Vanellus leucurus*	+	+	+	+	-	1,5
25.	Pintail Snipe	*Gallinago stenura*	+	+	+	+	-	1,5
26.	Common Snipe	Gallinago gallinago	+	+	+	+	-	1,5,6
27.	Jack Snipe	*Lymnocryptes minimus*	+	+	+	+	-	1,5
28.	Black-tailed Godwit	*Limosa limosa*	+	+	+	+	-	1,5,6
29.	Bar-tailed Godwit	*Limosa lapponica*	+	-	-	+	-	1,5
30.	Eurasian curlew	*Numenius arquata*	-	-	-	+	-	5
31.	Spotted Redshank	*Tringa erythropus*	+	+	+	+	-	1,5
32.	Common Redshank	*Tringa totanus*	+	+	+	+	-	1,5,6
33.	Marsh Sandpiper	*Tringa stagnatilis*	+	+	+	+	-	1,5
34.	Common Greenshank	*Tringa nebularia*	+	+	+	+	-	1,5
35.	Green Sandpiper	*Tringa ochropus*	+	+	+	+	-	1,5
36.	Wood Sandpiper	*Tringa glareola*	+	+	+	+	-	1,5,6
37.	Common Sandpiper	*Actitis hypoleucos*	+	+	+	+	-	1,5,6
38.	Marsh sandpiper	*Tringa stagnatillis*	-	-	-	+	-	5
39.	Little Stint	*Calidris minuta*	+	+	+	+	+	1,2,3,5
40.	Temminck's Stint	*Calidris temminckii*	+	+	+	-	-	1,2
41.	Ruff	*Philomachus pugnax*	+	+	+	+	+	1,2,3,5
42.	Pied Avocet	*Recurvirostra avosetta*	+	+	+	+	+	1,2,3,5
43.	Black-headed Gull	*Larus ridibundus*	+	-	-	-	-	1
44.	Black-bellied Tern	*Sterna acuticauda*	+	-	-	-	-	1
45.	India Whiskered Tern	*Chlidonias hybridus*	+	-	-	-	-	1

Table 3. List of water dependent migratory birds of southern Rajasthan ("+" = presence reported and "-" = presence not reported).

S. No.	Common name	Scientific name	Udaipur	Dungarpur	Banswara	Pratapgarah	Chittorgarh	Reference
1.	Western Marsh-Harrier	*Circus aeruginosus*	+	+	+	-	-	1,2
2.	Steppe Eagle	*Aquila nipalensis*	+	+	+	-	-	1,2
3.	Osprey	*Pandion haliaetus*	+	+	+	+	+	1,2,4,5
4.	Blue-tailed Bee-eater	*Merops philippinus*	+	+	+	+	-	1,2,5
5.	Common Swallow	*Hirundo rustica*	+	+	+	+	-	1,2,5
6.	White Wagtail	*Motacilla alba*	+	+	+	+	+	1,2,3,5,6
7.	Citrine Wagtail	*Motacilla citreola*	+	+	+	+	+	1,2,3,5
8.	Yellow Wagtail	*Motacilla flava*	+	+	+	+	+	1,2,3,5,6
9.	Grey Wagtail	*Motacilla cinerea*	+	+	+	-	+	1,2,3
10.	Brown-headed Gull	*Larus brunnicephalus*	-	-	-	+	-	5
11.	Pallas's Gull	*Larus ichthyaetus*	+	-	-	-	-	6

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Role of Bird Fairs in Conservation of Birds and their Habitats

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It is a well-known fact that awareness is the key to change. "Awareness is like the sun, when it shines on things they are transformed." As we are talking about the Bird Fairs we must first know about the main purpose behind it. Actually bird fairs and festivals are not for entertainment, but organized purposefully to sensitize people, students, scholars to educate and teach them how important is a bird's role in environment and in ecology. Birds are very sensitive towards their habitat and climatic conditions. They don't like pollution, disturbance in their habitat and artificial changes made by humans in their environment. Sometimes they have to adapt it forcefully due to no option. Even a slightest change in temperature can change their whole routine. If the number of certain bird species is declining, it's a warning sign for humans, to stop playing with the environment or to face the consequences. Bird fair was first organized in 1987 in Britain at Rutland Water Nature Reserve called "The Wildfowl Bonanza". Since then it has come a long way. Now it has become an educational and interesting event that most of the countries are celebrating it. Bird fairs play an important role in conservation of birds and their habitats. Many experts in the field of bird conservation are involved in bird fairs; they teach how conservation can be done, what we have to do and what we must not do. People explore the surroundings through bird fairs, find new places and habitats of birds and if found important, may ask Government to give it a protective status so that the habitat can be conserved. IBA (Important Bird Area) and RAMSAR Sites are certain examples. BNHS, IUCN, IBCN and many agencies are working in this regard. However, in India, many states like Uttar Pradesh and Goa and some others are celebrating this as a state festival, while in Rajasthan, it is getting momentum. Jaipur, Udaipur, Ajmer, Dungarpur, Kota, Jhalawar, Dausa, Karauli, Bhilwara and Bharatpur districts are already organizing this event and there are many other districts in the queue. We hope that Government may recognize bird festivals as a state festival. Budget must be allotted to the districts to organize this function on regular basis. There are already many threatened species of birds in the state. Awareness is the key to save the birds, so we have to take step now to popularize events like bird fairs to sensitize people towards the conservation of birds and their habitats.

White-Naped Tit (Parus nuchalis) in Rajasthan, with Special Reference to Southern Parts of the State

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As many as 21 species of tits are known from India which belong to six genera. The Parus is the biggest Genus which contains 13 species in the country. Rajasthan has three species of genus Parus namely, *Parus major* (Great Tit), *P. nuchalis* (White-naped Tit) and *P. xanthogenis* (Black-lored Tit). The *P. nuchalis* is an endemic species of India which has a very restricted and disjunct range in the west and south part of the country (Ali & Ripley1983). The available information in scientific literature indicates that population of the *P. nuchalis* is decreasing, primarily due to destruction of natural habitat.

So far, this species has been reported from 13 districts of Rajasthan(Fig.-1). A table, containing information of districts and locations there in of the species occurrence is presented below:

S.No.	District	Location(s) of occurrence	Reference
1	Ajmer	Kishangarh, Raoli - Todgarh, Nasirabad, near Ramsar, Ajmer, Sonkhaliya, Beawar hilly area	www.rdb.or.id ,Hussain *et al*.1992, Tiwari 2001, Tiwari *et al*.2013
2	Bikaner	Rajasthan Agricultural Univercity Campus, near Rojari village on Bikaner- Sri Ganganagar border	Dookia2007
3	Chittorgarh	Bassi sanctuary	Tiwari *et al*.2013
4	Jalore	Sundamata, Jalore	Tiwari *et al*.2013
5	Jaipur	Sambhar Salt Works, Kanota, Nasia old fort, Nahargarh Biologi cal Park, Jaipur Khichi forest area(near Achrol), Dantla Forest Block, Godiana Forest Block,	Tiwari *et al*.2013
6	Jodhpur	Jodhpur	Hussain *et al*.1992
7	Jhalawar	Jhalawar	Hussain *et al*.1992, Tiwari 2001
8	Nagaur	Maroth(Moroth), Panchota hill, Makarana, Sambhar lake	Adam 1873,Hussain *et al*.1992, Tiwari 2001, Tiwari *et al*.2013
9	Pali	Bar, Desuri -ki-nal, Malgarh ki Chowki, Jobha village, Sumer, Sendra RF	Tehsin *et al*.2005, Tiwari *et al*.2013
10	Rajasamand	Barawa village(Nathdwara tehsil)	Tiwari 2007
11	Sikar	Ruliyana village(Between Bay and Danta villages)	Sharma 2004
12	Sirohi	Mt.Abu	Butlar 1875
13	Udaipur	Sajjangarh sanctuary, Jaisamand sanctuary, Jalburj(near Pichola), forest area near Army cantonment, Shanti Niketan Colony(Bedla-Badgoan), Deola, Jamuniya ki nal, Jungle Safari Park, Machhla Magra, Banki Research Farm, Kaler RF, Neemach Mata, Moti Magri, Thur Magra, Forest near Bedla, Chirwa Ghata, Baghdarrah Nature Park, Udaisagar forest area, Segra forest block, Bordi and Debari area, Chokadia, Kodiyat, near Keora village, Bada Hawala village, Ghasa, Menar, Sajjangarh Biological Park,	Hussain *et al*.1992, Tiwari 2001, Sharma 2004, Mehra 2004, Tiwari 2007, Tiwari *et al*.2013, Sharma & Koli 2014, Sharma 2015 & 2016

Fig.1 : Distribution of White-naped Tit in Rajasthan.

White-naped Tit in Southern Rajasthan:

Five districts of southern Rajasthan namely, Udaipur, Rajsamand, Sirohi, Pali and Chittoragh support population of White-naped Tit. This species especially likes tropical thorn and scrub forest having Acacias in plenty and prefers where Acacia nilotica, A. senegal, A. leucophloea, Capparis deciduas, Grewia tenax, Salvadora spp., Euphorbia spp. etc are common. It also associates with dead and decaying trees, where it roosts and nests in holes made originally by Yellow-crowned Wood Peckers (Tiwari & Rahmani 1996). In Sajjangarh area it roosts in hollows of Salar trees (Boswellia serrata) and iron poles (Sharma & Koli 2014, Sharma 2015 & 2016), probably owing to paucity of natural holes.

During breeding season, this species confines it self to upper reaches of hills where Salar trees (Boswellia serrata) are abundant. Holes and hollows confined to Salar trees are selected by the birds for nesting. This behavior of the species can be easily seen in Sajjangarh sanctuary area (Sharma & Koli 2013).

Five sanctuaries of Mewar zone namely, Sajjangarh, Bassi, Kumbhalgarh, Raoli-Todgarh and Jaisamand sustain population of White-naped Tit. Sajjangarh sanctuary, Baghdarrah Nature Park and conical isolated hills bordering Udaipur city, are the finest habitat of White-naped Tit in southern Rajasthan. Conical hills are prone to fast runoff of rain water hence they remain relatively dry and develop xerophytic thorny vegetation on their slopes. Such habitat is much preferred by the White-naped Tit. Southern Rajasthan, especially Sajjangarh sanctuary and Baghdarrah Nature Park have great potential for White-naped Tit centred eco-tourism.

IUCN has recorded White-naped Tit as a vulnerable species. Habitat degradation is a serious problem for the existence of this species. Besides protection of xerophytic thorny vegetation, protection of snags (dead trees) is also needed. Paucity of holes hinder normal breeding activities of the species. Effective protection of old aged trees having nesting holes is also required.

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Student Guide for Birding: Bird Watching Apps

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"I don't feed the birds because they need me; I feed the birds because I need them"- **Kathi Hutton**

Undoubtedly birds are one of the eye catching beautiful creations of Nature. With the pace of development and rapid sprawling of urban environs, the passion of developing hobby of exploring nature gets defeated among the youngsters. Further, identification of the species is difficult for the students. Additionally in the modern age of information, it is hard for the person to use the traditional sources of information. Also, it is not easy for every student to get the guidance of experts or bird specialist. Understanding such challenges, we need to popularize the modern technique of identification through use of modern ICT tools, i.e., Bird Watching Apps. The use of mobile among students is popular and why not to take advantage of the same for creating popularization of birding among students!

Bird recognition is made easier with the help of numerous applications and software available on internet either free or paid. Some of the important free apps for Indian Birds are as following:

1. **Indian Birds** (Nature Web) -"Indian Birds" app is the application that displays bird names in regional languages (vernacular names) including Hindi. It is easy to use it as a field guide at birding sites, works in offline mode, allows to create checklists (offline) with export to CSV feature, and can be moved to SD Card.
2. **Indian Birds** (Livera Media Pvt Ltd) - The App is useful for both amateur bird-watching enthusiasts and seasoned ornithologists in India which retains Dr. Salim Ali's original text while describing and illustrating 538 species.
3. **Birds of India** (Archit Shrivastava) -The "Birds of India" app is designed to showcase the real photos from the field along with identification tip and behavioral information to help in identifying a bird.
4. **iNaturewatch Birds** (Ladybird Environmental Consulting LLP) –It is a nature based Mobile app developed to promote nature study widely across cities of India. This bird mobile app covers 50 common bird species found in urban environs.
5. **Complete Birding** (Nash Labs) - a comprehensive mobile field guide covering over 1300 species
6. **eBird** (Cornell Lab of Ornithology) - eBird Mobile makes it easy to record the birds we see in the field, and link these observations with eBird--a global online database of bird records used by birders around the world. It makes it easy to keep track of what we see, while making our data openly available for scientific research, education, and conservation.
7. **World Bird Guide** (The BBI) - Through selecting any site in the world, the BBI World Bird Guide provides a list of the most popular species observed within the selected region (defaulting to a 50km radius, auto-expanding outwards until a species is found).
8. **Panchhi Mitra** (Centre for Geoinformatics, IIFM, Bhopal, India) - This application contains images of 40 common birds found in Central India along with their typical calls. It aims to serve as a ready reckoner for anyone wanting to take their first flight into the wonderful world of birds. This application has been created specifically for school and college students but can be used by anyone interested in birdwatching or birding.
9. **Indian Bird Calls** (Songbird Apps) - this app is a bird call identification.
10. **Indian Bird Sounds** (SV Software Studio) - "Indian Bird Sounds" is a quick reference app which comprise of calls/songs of around 80 birds from Indian subcontinent. This is an offline app and can be used anywhere without being connected to internet.

Watching and recognizing feathered fauna is now made easier and interesting! ENJOY BIRDING!

Green Munia: Nesting record in Mount Abu, Sirohi District, Rajasthan

Hemant Singh, IFS
DCF WL Mt. Abu

Green Munia *(Amandava formosa)* or Green Avadavat known as "Tiger Finch"due to presence of black bars on its flanks which resembles stripes of Tiger, is a very rare bird to see, except in Mount Abu where flocks of these small beauties can be seen with a very little effort. It is one of the most beautiful birds among eight species of Munias found in India. Male has a distinguished green and yellow colour with shiny red bill while females are slight dull in colour. Due to their beautiful appearance and melodious calls, these small birds are highly in demand in pet trade in India. The name "avadavat" is said to be corrupt name of the city of Ahmedabad in Gujarat, India, which was important centre of bird trade.

Although little is known about the bird's habits in the wild, but it mainly inhabits dry and shrub jungles, small grasslands having low bushes, sugarcane and maize fields, and open scrub forests. Main diet of the bird consists of seeds of plants and small insects. Green Munia feeding on seeds of Lantana can be easily seen in Mount Abu.

Green avadavat is globally threatened endemic species found very unevenly distributed in Central India. Mount Abu holds a significant population of these birds and hence the place is popular among the birdwatchers across the globe. This species is listed as Vulnerable in the IUCN red-list of threatened species as its population is rapidly declining. Green Munia is listed in Schedule IV of the Wildlife (Protection) Act, 1972.It is also protected under Appendix II of the Convention on International Trade in Endangered Species (CITES). Despite protected under many regimes of the law, population of this species is declining rapidly, mainly because of habitat degradation, agricultural infestation and illegal trade. Studies indicate that about 2,000 individuals of this species are caught every year and a majority of them are smuggled out of India for the pet-trade under the name of 'Tiger finch'. Females of Red Munia are also mixed and sold in market as Green Munia.

Nesting record in Mount Abu

Main breeding season of Munia is from January to May. Very few records of its nesting are available. Significant record of nest building is available from the notes of F.R. Blewitt in the year 1875 describing the globular nests in the low bushes & sugarcane fields in Bhandara, Maharashtra. The clutch size is from 5-6, snow white oval shaped eggs. Both male and female birds play important role during nesting season. Munias are known to live in groups and also breed in colonies.

A breeding colony consisting of 10-15 pairs of Munias was discovered by the author in the month of August this year (2017). The nest was observed for 10-15 days as male was continuously building it in the Lantana bush about five feet high from the ground and female was preparing for housing in it. Nest was globular in shape but after a few days it got destroyed due to heavy rains and was abandoned. But an interesting phenomenon was observed post monsoon as males were again carrying the nesting material by plucking the grass blades from ground to rebuild the nests slightly deep in the bushes. The good news is that the bird is breeding in Mount Abu and it is a positive sign for long term survival of the species.

Bitterns of Udaipur, Rajasthan: The Rare Visitors of Wetlands

Vijendra Prakash Parmar

There are mainly five types of bitterns found in India. In Udaipur and lakes around this city I have found all of them. Bitterns are very secretive birds found in reeds and adopt a camouflage posture, bill pointing upwards and neck stretched vertically. Our lakes and the reeds around them are home of these birds. The bitterns are relatively rare birds in Rajasthan, mostly seen in the Bharatpur National Park. I also observed a Black Bittern nesting here which indicates that our wetlands are providing good habitat to these birds. Besides bitterns more than 300 other bird species are also seen in and around Udaipur.

The Eurasian Bittern or Great Bittern was sighted by the author along with Shri Alok Upadhyay and his friend from Ireland Mr. Paul Patrick Cullen in December, 2013. Paul have already seen this bird in Europe and he immediately suspected it as Butaurus stellaris. He took many photographs for confirmation of the species. One more sighting of Great Bittern was in January, 2017 at Menar Lake by me and my friends, Shri Uttam Pegu, Shri Alok Upadhyay and Shri Varun Lunia. In August 2017, we the group of 7 bird watchers have sighted Black bittern and Cinnamon bittern near Bhatewar Lake. The Black bittern was present on its nest there. Recently in November 2017, I sighted Yellow bittern and Little bittern in the heart of Udaipur City near Pichola Lake. Earlier I also sighted Yellow bittern at Badal lake (Dungarpur, Rajasthan) in February 2016 and January 2017. Bitterns are cryptic interesting birds. Their identification clues in the field are as following:

Eurasian Bittern or Great Bittern (Botaurus stellaris):

This bittern is more likely to be heard than seen. The loud booming call, uttered by males during the breeding season, can be heard from up to two kilometers under suitable conditions. It is a secretive bird, its plumage subtly mottled in various shades of brown, which help it to blend with the reed stalks amongst which it lives. When startled, it adopts a camouflage posture, bill pointing upwards and neck stretched vertically. In flight, it resembles its close relative the heron but, in good visibility, is easily recognized by its coloration. Bitterns feed on fish, amphibians and invertebrates. They usually hunt along the reed margins in shallow water and on the edges of dykes. Males are polygamous with each mating with up to five females.

Black bittern (Ixobrychus flavicollis):

Black bittern, one of the old world origins, is a resident bird of India. The bright color of the bird easily distinguishes it from the other bittern species. In the daytime, one can find black bitterns resting in trees, on the ground and amongst dense reeds. They tend to fly frequently and have a distinct booming call, mainly heard during the breeding season.

Cinnamon bittern or Chestnut bittern (Ixobrychus cinnamomeus):

The Cinnamon bittern is a small bird of old world origin. It is seen inhabiting the tropical parts of Asia, stretching from India and Sri Lanka to China and Indonesia. Cinnamon bitterns of India are very shy and secretive in nature and can easily conceal themselves. One can see them only during flight, which is typically short and low.

Little Bittern (Ixobrychus minutus):

The little bittern is, as its name suggests, a tiny heron species, most easily identified by its dark back, dark cap, buffy-white neck and wing patches, which contrast with the dark flight feathers, particularly during flight. In the adult male, the crown is greenish-black and has elongated feathers that form a slight crest, while the back and tail are greenish-black, the chin and throat are white, and the underparts are buff-white, sometimes with a degree of brown streaking. The beak is yellowish, with a dark upper edge, the eyes are yellow, and the legs and feet vary from yellowish to green. The female little bittern is smaller and duller than the male, with a less glossy crown, more brownish dark markings, less contrasting buff wing patches, and brown streaks on the underparts. Juveniles are more heavily streaked than the adults and have a duller beak and legs. During the breeding season, the plumage of the adults is brighter, the feathers of the upper breast are longer, and the lower bill and bare skin of the face may flush red. The calls of the little bittern include a deep, repeated 'bark', given during the breeding season.

Yellow Bittern (Ixobrychus sinensis):

The yellow bittern species is a small bird, measuring 30 to 40 cm in length and weighing 80 to 100 grams. The wingspan is 45 to 55 cm. They have a short neck and long bill. The male is uniformly dull yellow above and buff below. Male has dull black to blue-grey crown and crest. It has brown forehead and sandy-brown throat. The neck and sides are streaked brown and buff. The breeding yellow bittern species habitat is reed beds. These bittern species inhabit fringe vegetation of water bodies. They are seen in freshwater marshes, ponds, lakes and pools with dense fringe vegetation. This bittern species feed mainly on insects and other invertebrates, fish and frogs. The breeding season of these bitterns is from May onwards. They construct platform like nest in the reed beds. This species is distributed in Middle-East region, Indian Subcontinent, Russia, China, Japan, Southeast Asia, Philippines and Indonesia.

LITTLE TERN (Sterna albifrons) AT RAJSAMAND LAKE

Vijendra Prakash Parmar

We, Vinay Dave and Vijendra Prakash Parmar were on a field trip of Rajsamand Lake in Summer of May, 2016. We went there to observe the large group of Sarus cranes which gather there on the wetland during this season of the year. It was a flock of about 45-50 Sarus cranes. While we were walking on the shore, we observed few little terns flying over the lake. Since we were far from them, at first sight we thought that these are River terns or Whiskered terns which are commonly seen hovering and fishing in the area. When we reached near them, then we observed that their size was relatively small and the behavior was also quite different from the other terns. Their number was 10. Since we saw them for the first time, we were excited. The Little Tern is one of world's smallest terns. They were flying very low over the lake and few of them were with the fish in their mouths. Few males were offering these fishes to the females. Later on, I scanned the literature and found that such kind of behavior of males is seen during mating season to impress the females. But I am not sure that they were breeding there. They are coastal birds found mostly in coastal lines of India and other countries. Besides little tern I have also observed the Pacific golden plover in breeding plumage and a Ruff in breeding plumage. I have also seen a red necked falcon flying over there.

subspecies: As many as six subspecies of little tern are known from various parts of the world as mentioned below:
albifron: found in Europe, North Africa and western Asia
guinea: found in west Africa
innominata: found off the islands in the Persian gulf
pusilla: found in India to Indonesia
sinensis: found in east Asia to Micronesia and Hawaii
placens: found in eastern Australia. Migrants can be encountered around much of the African coast, off the western coast of India, and around the coasts of South-East Asia and Australasia.

Identification of Little tern:

Biometrics: Length: 22-28 cm, Wingspan: 47-55 cm, Weight: 47-63 gm.

The adult has grey back and upperwing, and white rump and forked tail. The outermost primaries are blackish. Head, crown and lores are black, forehead is white. The long, thin bill is bright yellow with reduced black tip. The eyes are dark brown. Legs and feet are yellow to orange-yellow. Both sexes are similar. The non-breeding adults have pale-streaked fore crown, white lores and black spot before the eye. The lesser coverts are dark. Legs, feet and bill are blackish. The juvenile has black-edged mantle feathers. Its plumage is white except dark wing-coverts and outer primaries. Secondaries and inner primaries are paler. It acquires the 1st winter plumage in October, and resembles non-breeding adults.

HABITAT:

The Little Tern frequents subtropical and temperate regions, and can be seen up to 2000 metres of elevation in Armenia. Populations living in continents are mainly found in coastal areas, but also inland along rivers. They occur on oceanic islands too. This species breeds on barren ground or sparsely vegetated sites such as sandy, shell, rocky islands, beaches, estuaries, lakes, salt-marshes, rivers and reefs. But it may occur on bare mud or in grassy areas too. Outside the breeding season, this species is mainly found in tidal creeks and coastal lagoons, but it may feed at sea.

CALLS AND SONGS:

The Little Tern's typical call is a sharp “kik-kik” often given in flight, and we can also hear a harsh “kyik” as alarm call, and a rapidly repeated “kirrikikki, kirrikikki”. The juvenile utters a piping “piepp”. The breeding colonies are very noisy.

BEHAVIOUR:

The Little Tern feeds primarily on small fish (3-6 cm) and crustaceans, but also insects, annelids and molluscs. This species forages by quartering over water, flying back and forth over the water surface. It often hovers and performs plunge-diving into shallow water, in order to catch preys. They may hunt in groups and the birds dive synchronously head down before plunging. Insects are caught inland from the vegetation. But the bird performs aerial-dipping on water surface, or hawks flying insects over water. It usually feeds close to the beach. They gather to roost with other species, often larger terns. During the breeding season, the male performs aerial displays during which it calls while bringing a fish in its bill to attract a female. Both birds fly together high in the air and alternating glides on stiff wings. The female swallows the fish brought by the male, or keeps it in her bill during displays. Courtship displays become more frequent once the pair is formed, and courtship feeding is common. Usually, the female remains on the territory and defends it, while the male feeds her regularly. Copulation may follow fish-transfer without prolonged displays. This tern is very agile in flight. It can hover when looking for fish before diving down. The direct flight is performed on rapid wing beats, much quicker than other terns except during displays.

REPRODUCTION:

The breeding season varies according to the range, but usually it takes place when the food resources are abundant. The Little Tern breeds in small to medium monospecific colonies, rarely more than 100 pairs, with nests placed at least 2 metres apart. The nest is a scrape on the ground, on beaches of the sand, pebbles, shell pieces, coral or rock, usually placed above the high tide-line, a few metres away from water. However, in marshy areas, the Little Tern may build a platform of vegetation or shells.

The female lays 2-3 creamy-white eggs with dark markings, and the downy chicks show similar plumage colour at hatching. Incubation by both parents lasts 21-24 days. The chicks are fed for about two months. They fledge 20-24 days after hatching, and can breed when 2-3 years old

PROTECTION / THREATS / STATUS:

The Little Tern is not currently threatened in spite of several local declines. This species is vulnerable to human disturbances on beaches, and to predation by gulls and Corvids at colonies. This species has usually low breeding success rate due to loss of eggs and chicks by predation, flooding of nest-site and bad weather condition involving nest failure.

Birds of Prey from Southern Rajasthan

SHARAD AGRAWAL


Long-legged Buzzard


Black-winged Kite


Changeable Hawk-Eagle


Oriental Honey Buzzard

Rajasthan is well known as desert state of Indian Union, but it is a place of rich biodiversity having waterfalls, grasslands, forests and lakes in many parts especially in its southern area where Aravalli mountain range is an important geomorphic feature. Because of its suitable varied habitats, southern Rajasthan supports more than three hundred of resident and migratory bird species.

Waterfowls, forests/terrestrial birds and grassland birds all depend on varied form of food sources. Many bird species live on insects, flower nectar etc.,while some species live on fishes and other aquatic food, yet some indeed depend on smaller birds or rodents, like "Birds of Prey". Birds of Prey are seen hunting on big bird like Flamingos also.

Birds of prey are much liked by photographers and birders. They are also known as Raptors which means "take by force". These birds are basically known for their keen vision which allows them to hunt properly even in the flight with the help of their powerful Talons. When we talk about Birds of Prey one is always confused with some species like storks and sea birds, as they too hunt on fishes and rodents, but here the main difference is of the hunt by talons. Birds of Prey are basically known to hunt by their talons.

Eagles, Ospreys, Kites, Hawks, Buzzards, Harriers, Vultures, Falcons and of course Owls are known as Birds of Prey. Every group of listed hunters has its own way to hunt for its sustenance. Eagles are known to hunt in forest as well as in and around lakes. Some migratory species of eagles can be seen in waste dumping grounds near the city too. They can be seen scavenging there whereas Harriers are seen in grasslands and shallow lakes. Ospreys may be seen fishing in big lakes having plenty of fishes. Indian species like Changeable Hawk Eagle and Crested Serpent Eagle hunt in forests. Black Kites normally are urban now and feed on rodents or accident kills and can be easily seen near dumps. Black-winged Kite can be seen near farms or on electric wires.


Eastern Imperial Eagle


Cinereous Vulture


Montagu's Harrier


White-eyed Buzzard

Bird Philately: An approach to develop compassion for birds

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More than just the activity of stamp collection, PHILATELY involve appreciation and research activities on stamps and postal history which gained acceptance in the later half of 19th century. However, the birth of this activity was the result of the creation of the postage stamp soon after the publication of the Post Office Reform: Its Importance and Practicability by Rowland Hill in 1840. The first stamp collector was an official at the British Museum, Doctor Gray whose announcement of calling stamps in The Times in 1841 popularized the hobby among children. In 1861, Potiquet published the first catalogue on stamps classification in France. The growing interest towards stamps lead to the formation of the specialized association.'Societe Philateliquell' being a short-lived oldest association founded in France in 1865 followed by others such as the 'Philatelic Society' of London (1869), the 'Societe Francaise de Timbrologiell' of Paris (1874) and the 'Internationaler Philatelistenvereinll' of Dresden (1877). These associations were the forerunners of many of today's societies, most of which are members of the IPF (International Philatelic Federation) through national federations.

With the diversification of the subject, the theme of Topical Philately popularly attracted the stamp collectors. This aspect relates the hobby of philatelist to a particular subject of concept. Bird on stamps is one such aspect.

Among the earliest bird stamps issued were three by Japan in 1875. Unfortunately, the illustrations are somewhat stylized but are probably a Bean Goose, a Pied Wagtail, and a Goshawk. The following year Colombia issued a stamp with a very recognizable Andean Condor, while Guatemala followed in 1879 with a Resplendent Quetzal. Many countries started producing bird stamps in the 1920s and 1930s. As per the Colnect website, about 33,132 stamps are available worldwide on birds where Asia's contribution is about 7,413 and India accounts around 130. In the Independent India, first picture of pigeon appeared in 1954 with an airplane but the stamps dedicate solely for birds was published in 1968.

Though the number of postage stamps in India is low as compared to other nations but the hobby of philately could be an asset for the youngsters in praising nature and its component especially birds. Popularizing the philately could be an asset for the conservationist community to bring the beautiful fauna at close proximity of the people.

Display of postal stamps with the theme of birds is a part of Bird Festival Event in Rajasthan which will not only inculcate the innovative ideas of creating awareness among common mass but also reviving a hobby which is limited to certain sections of human society.

Postage Stamps display in Bird Festival could be an initiation of the way towards developing programs on Thematic Philately under the ECO CLUB activities. Further, the art of Philately could be used for creating compassion towards our feathered friends and encourage the postal department to publish more stamps on birds in near future.

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एवियन इनफ्लूएन्जा

(बर्ड–फ्लू/फाउज प्लेग)

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एवियन इनफ्लूएन्जा रोग क्या है ?

यह एक वायरस जनित पक्षियों का रोग है, जिसमें पक्षियों में मृत्यु दर 100 प्रतिशत तक हो सकती है। इसमें श्वास एवं पाचन तन्त्र प्रभावित होता है इसे फाउज प्लेग भी कहते हैं।

यह रोग किनमें होता है ?

इस रोग से मुख्यतः घरेलु व जंगली पक्षी जैसे मुर्गी, टर्की, बतख, वाटर फाउल आदि ग्रसित होते हैं।

यह रोग किस वायरस से फैलता है ?

यह रोग आर्थोमिक्सोविरिडी परिवार के इनफलूएन्जा जाति के ए टाइप के वायरस से फैलता है। एवियन इनफलूएन्जा वायरस की 15 उप जातियां होती है जिनमें से एच–5, एच–7, उप जाति से पक्षियों में प्राणघातक अति संक्रामक रोग फैलता है।

यह रोग पक्षियों में कैसे फैलता है ?

- यह वायरस रोगग्रस्त पक्षी की लार, नासास्त्राव एवं बींट में पाया जाता है जिसके सम्पर्क में आने से स्वस्थ पक्षियों में भी यह रोग फैल जाता है।
- यह रोग संक्रमित आहार, पानी, उपकरण आदि के सम्पर्क आने से भी फैलता है।

क्या मनुष्य भी इस रोग से ग्रसित हो सकता है ?

सामान्यतः एवियन इनफलूएन्जा वायरस से मनुष्यों में रोग उत्पन्न नहीं होता है। किन्तु इस वायरस में निरन्तर परिवर्तन से नई उपजातियां विकसित होती रहती हैं। इनमें से कुछ उपजातियां पक्षियों के सम्पर्क में रहने वाले मनुष्यों में भी घातक श्वास रोग उत्पन्न करती है।

मनुष्य में होने वाले रोग के क्या लक्षण हैं ?

- सांस लेने में तकलीफ।
- जुकाम होना एवं आंखों का लाल होना।
- ज्वर व मांस पेशियों में दर्द।
- निमोनिया।

पक्षियों में रोग के क्या लक्षण हैं ?

- अचानक अधिक संख्या में पक्षियों की मृत्यु (मृत्यु दर 100 प्रतिशत तक भी हो सकती है)।
- अण्डा उत्पादन में अत्यधिक कमी।
- कलंगी (Comb) व लटकन (Wattles) पर सूजन एवं नीलापन।
- चौंच और नासाछिद्र से स्राव जो रक्त युक्त भी हो सकता है।

उपचार:

इस रोग का कोई उपचार नहीं है। फिर भी बचाव हेतु निम्न सावधानियां आवश्यक हैं:

- कुक्कुट फार्म पर किसी भी रोग की जानकारी मिलने पर अविलम्ब पशु चिकित्सक से सम्पर्क करें, साथ ही सम्बन्धित जिले के उपनिदेशक, पशुपालन विभाग को सूचित करें।
- कुक्कुट फार्म पर एवियन इनफलूएन्जा की पुष्टि होने पर समस्त पक्षियों को मार कर जला दिया जावें अथवा गहरे गडढे में कीटाणुनाशक दवा के साथ दबाकर नष्ट कर दिया जाना चाहिए।
- रोगग्रस्त कुक्कुट फार्म के सभी अण्डे, लिटर आदि को भी जला कर नष्ट कर दिया जाना चाहिए।
- कुक्कुट फार्म पर पूर्ण कीटाणुनाशन की प्रक्रिया अपना कर रोग की रोकथाम की जानी चाहिए।

कुक्कुट रोगों की रोकथाम हेतु सामान्य सफाई एवं किटाणुनाशन की प्रक्रिया:

रोग मुक्त चूजे/पक्षी प्राप्त करना: कुक्कुट फार्म पर चूजे लाने से पहले यह सुनिश्चित करें कि जिस हेचरी से चूजे प्राप्त कर रहे हैं वहां गत तीन माह के दौरान किसी प्रकार का रोग न हुआ हो।

आगन्तुक के कुक्कुट फार्म में प्रवेश पर नियन्त्रण:

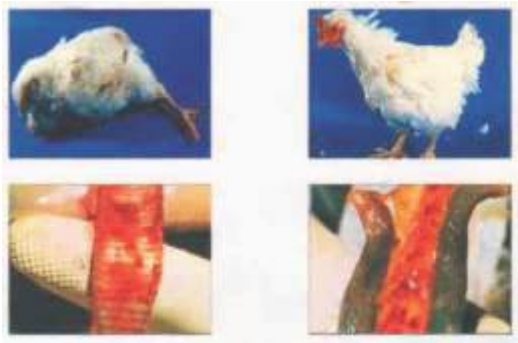
- किसी भी आगन्तुक को कुक्कुट फार्म में प्रवेश नहीं करने दिया जाये।
- कुक्कुट फार्म के लिये दाना, पानी, दवाईयां, अण्डों की ट्रे, पिंजरा, उपकरण या अन्य कार्य हेतु फार्म पर आने वाले व्यक्ति एवं वाहन के माध्यम से रोग के कीटाणुओं का संक्रमण हो सकता है।
- फार्म में प्रवेश करने वाले द्वार पर ही वाहन को कीटाणुनाशक घोल का छिडकाव कर किटाणु रहित करने के बाद ही फार्म परिसर में प्रवेश करने दिया जाये।
- निजी वाहनों का प्रवेश कुक्कुट फार्म में वर्जित रखें। यदि किसी व्यक्ति का फार्म में प्रवेश करना आवश्यक हो तो उसे डिस्पोजेबल कपडे, मास्क, दस्ताने, गमबूट/शु–कवर आदि पहन कर प्रवेश करने दिया जावे।
- फार्म पर बाहर से आने वाली अण्डों की ट्रे, पिंजरा आदि को किटाणु रहित किया जावे।
- कुक्कुट फार्म में परिसर में खरपतवार की भी सफाई करवाकर चूहों व कीड़े–मकोड़ों की रोकथाम की जावे।
- कुक्कुट फार्म में कुतों, जंगली जानवरों के प्रवेश को रोका जाना चाहिए।
- सभी प्रकार के अपशिष्ट गढढे में कीटाणु नाशक दवा के साथ दबाकर नष्ट कर दिये जाने चाहिए।

कुक्कुट फार्म पर रोग की संभावना होने पर ध्यान देने योग्य बिन्दु:

- कुक्कुट फार्म पर रोग की संभावना होने पर क्वारनटाइन पक्षियों को निगरानी में रखना एवं पूर्ण कीटाणुनाशक किया को अपनाया जायें।
- पक्षियों को एक पेन से दूसरे पेन में स्थानान्तरित नहीं करे।
- इस तरह के फार्म से किसी भी पदार्थ, उपकरण, खाद, दाना आदि या अण्डे का बेचान नही करे।
- जिस फार्म पर रोग प्रकोप पाया गया है एवं रोग की रोकथाम के पश्चात क्लिनिकल लक्षण नहीं पाये जावें तो भी 30 दिवस तक पक्षी, अण्डे खाद आदि का बेचान नही किया जावे। इस अवधि के बाद पशु चिकित्सक की सलाह से ही बेचान किया जावें।
- ऑल इन ऑल आउट पद्वति कुक्कुट रोगो की रोकथाम हेतु लाभकारी रहती है।
- इसमें फार्म के सभी पक्षी एक साथ विक्रय करने के बाद तीन सप्ताह बाद पुनः नया बैच लेना चाहिए। प्रथम सप्ताह में कुक्कुट घर का पुराना लिटर साफ करना चाहिए।
- द्वितीय सप्ताह में दीवारों एवं फर्श पर किटाणुनाशक घोल का छिडकाव करना चाहिए तथा वर्ष में दो बार सफेदी करनी चाहिए।
- तीसरे सप्ताह में फॉरमल्डिहाइड गैस से कीटाणुनाशन किया जाना चाहिए।

रोग के लक्षण

मृत पक्षी में रोग की पहचान



पक्षियों की पसंदीदा सैरगाह है वागड़ अंचल

कमलेश शर्मा
सहायक निदेशक (जनसंपर्क) बांसवाड़ा (राज.)

प्रदेश के दक्षिण में अवस्थित वागड़ अंचल (बांसवाड़ा–डूँगरपुर जिला) ऐतिहासिक, धार्मिक एवं पुरातात्विक महत्व रखने के साथ–साथ जनजातीय लोक सँस्कृति का बहुआयामी दिग्दर्शन कराता है। सतरंगी आदिवासी संस्कृति, विमोहनी लोक परंपराएं और शिल्प वैशिष्ट्य को अपने में समाहित किए हुए यह क्षेत्र प्रवासी व स्थानीय पक्षियों की सैरगाह के रूप में भी प्रसिद्ध रहा है।

नैसर्गिक सुषमा से समृद्ध इस अंचल में लबालब जलाशयों के तटों व वृक्षों पर विचरण करते देशी–विदेशी परिन्दे और वनाच्छादित क्षेत्रों में उन्मुक्त घूमते वन्यजीवों से इस जिले की अपनी अलग ही पहचान है और यही कारण है कि इस अंचल के प्रति अब विदेशी शोधकर्त्ता भी आकर्षित होने लगे हैं।

दोनों जिलों के सैकड़ों जलाशयों के साथ–साथ कड़ाना बैकवाटर क्षेत्र, सोम कमला आंबा बांध जलभराव क्षेत्र, माहीडेम और लगभग पचास वर्ग किलोमीटर क्षेत्र में पसरे टापुओं पर शीतकाल के आरंभ होते ही देश–विदेश के विभिन्न हिस्सों से बड़ी संख्या में प्रवासी पक्षी आते हैं। इस दौरान इन जलाशयों में जलक्रीडारत पक्षियों की चहचहाहट यहां की आबोहवा में जीवन्तता पैदा करती है। वागड़ अंचल में लगभग 264 प्रजातियों के पक्षी पाए जाते हैं। इनमें करीब 100 प्रजातियां जलीय एवं 150 प्रजातियां स्थलीय पक्षियों की हैं। इसमें से करीब 100 प्रजातियां शीतकालीन प्रवासी पक्षियों की हैं जो प्रतिवर्ष शीतकाल में प्रवास पर आती हैं।

वागड़ अंचल के प्रमुख जलाशय :

डूँगरपुर जिले के प्रमुख जलाशयों में डूंगरपुर शहर के गेपसागर व साबेला तालाब के साथ ही निकटवर्ती एडवर्ड समंद व विजयसागर जलाशय, खेड़ा कच्छवासा का रणसागर, पूंजपुर का पूंजेला तालाब, फलोज, बोड़ीगामा छोटा, साबला, निठाउवा, इन्दौड़ा, मेवाड़ा बांध, सागवाड़ा, गलियाकोट, घूघरा एनीकट आदि जलाशयों के साथ ही सोम कमला आंबा व माही–कड़ाणा बैकवाटर के जल भराव क्षेत्रों में बड़ी संख्या में पक्षियों को जलक्रीडाएं करते देखा जा सकता है।

बांसवाड़ा जिले में दाहोद रोड़ पर स्थित सुरवानिया डेम भी पक्षियों की दृष्टि से समृद्ध स्थल है। कुल 465.80 एफसीएफटी जल भराव क्षमता वाले सुरवानिया डेम के तीन किलोमीटर लम्बाई में फैले पानी के बीच हजारों की संख्या में देसी–प्रवासी पक्षी जलक्रीड़ाएं करते हैं। इसी प्रकार करीब पचास वर्गकिलोमीटर में पसरे माही के बैकवाटर के छिछले पानीवाले क्षेत्र तथा टापुओं वाला क्षेत्र पक्षियों के पसंदीदा स्थान हैं। छिछले पानी में जलीय वनस्पतियों और मछलियों को खाने के शौकीन प्रवासी और स्थानीय पक्षी इन टापूओं पर आश्रय लेते दिखाई देते हैं। इसी प्रकार इन टापुओं पर स्थित वृक्षों पर प्रजनन करते पक्षियों को भी देखना सहज है। माही नदी पर गैमन पुल के निचले हिस्से में जब पानी कम हो जाता है तब यहां पर सैकड़ों की संख्या में खुबसूरत पक्षी फ्लेमिंगों जलक्रीड़ा करते दिखाई देते हैं। कच्छ के रण में प्रजनन करने वाले ग्रेटर व लेसर फ्लेमिंगों पक्षी प्रतिवर्ष प्रजनन से पूर्व यहां जरूर आते हैं और इस दौरान पक्षीप्रेमी भी इन परिंदों को निहारने के लिए यहां पहुंचते हैं। इसके अतिरिक्त जिला मुख्यालय पर स्थित डायलाब, आनंदसागर, राजतालाब, कागदीपिकअप वियर के साथ ही लोधा तालाब, कूपड़ा तालाब, तलवाड़ा का तालाब, बड़ोदिया, बुड़वा, घाटोल का हेरो डेम, लोहारिया तालाब, लसाड़ा, अखेपानजी का गढ़ा, नवागांव, कडाणा बैक वाटर क्षेत्र, भगोरा तालाब, बोरी, आजना, नवागांव, मेतवाला, भुवासा तालाब आदि जलाशय पक्षियों की दृष्टि से सर्वाधिक समृद्ध जलाशय हैं।

इन जलाशयों में बार हेडेड गूज, ग्रे लेग गूज, रडी शलडक, शॉवलर, पिनटेल, पोचार्ड, टफटेड पोचार्ड, गेडवाल, मेलार्ड, विजन, स्पॉट बिल डक, कॉम्ब डक, विसलिंग टील, कॉमन टील, कोटन टील, मारबल टील, कूट आदि प्रजातियों की बतखों के साथ ही ब्लेक नेक्ड स्टॉर्क, व्हाईट नेक्ड स्टॉर्क, पेन्टेड स्टॉर्क, ऑपन बिल स्टॉर्क, ब्लेक आईबीस, व्हाईट आईबीस, ग्लोसी आईबीस, परपल हेरोन, ग्रे हेरोन, कॉर्मोरेन्ट, फ्लेमिंगो, पेलिकन तथा विभिन्न प्रजातियों के ईग्रेट्स भी दिखाई देते हैं। स्थानीय पक्षियों में सारस क्रेन, मोर व अन्य प्रकार के घरेलू पक्षी अहर्निश इस अंचल को अपने कलरव से गुंजायमान रखते हैं।

परिंदों को आकर्षित कर रहे प्रदूषणमुक्त जलाशय :

शांत और सुरम्य वातावरण, प्रदूषण से मुक्त आबोहवा, वर्ष भर पानी से न्यूनाधिक मात्रा में भरे रहने वाले वागड अंचल के छोटे–छोटे तालाब और इनमें पक्षियों के लिए पाई जाने वाली वनस्पतियां प्रवासी पक्षियों को पिछले कई वर्षों से आकर्षित कर रही हैं। पक्षी विशेषज्ञों की माने तो यदि इन तालाबों और पक्षियों के ठिकानों को उचित संरक्षण और संवर्धन प्रदान किया जाए तो यह उत्तर भारत में अन्तर्राष्ट्रीय ख्याति प्राप्त घना पक्षी अभयारण्य का विकल्प बन सकता है। गत वर्षो में जिले में प्रवासी पक्षियों की तादाद में अभूतपूर्व वृद्धि दिखाई दी गई है जिसका कारण यहां वर्ष भर नहीं सूखने वाले तालाब, शांत वातावरण, पक्षियों के शिकार की प्रवृत्ति का नहीं होने और प्रदूषण रहित क्षेत्रों का होना ही है। इसके अलावा विलुप्ति के कगार पर जा रहे कई पक्षियों के साथ सारस क्रेन व कई प्रकार के स्टार्क्स यहां पर बडी संख्या में प्रजनन कर रहे हैं।

आसपुर उपखण्ड क्षेत्र में पक्षी अभयारण्य की संभावना :

डूंगरपुर जिले के आसपुर उपखण्ड क्षेत्र के तालाब पक्षियों के लिए बेहतर है और गत वर्षों में यहां के तालाबों में बडी संख्या में प्रवासी पक्षियों ने अपना डेरा डाला है। विशेषज्ञों के अनुसार साबला कस्बे को केन्द्र मानकर 25 वर्ग किलोमीटर क्षेत्र को पक्षियों के लिए संरक्षित किया जा सकता है क्योंकि यह क्षेत्र प्रदूषण मुक्त और सर्वाधिक जलाशयों वाला है। इस क्षेत्र के साबला, बोडीगामा बडा व छोटा, पिण्डावल, मुंगेड,

खेडाआसपुर, सोम कमला आंबा बांध, टोंकवासा, बडौदा, पचलासा, पूंजपुर, वाडागोराप, गलियाणा, बनकोडा, मोवाई, खानन, गामडी, सोलज, वालाई, लोडावल, वणवासा, भेखरेड, मोदपुर, पारडा ईटीवार के साथ ही बांसवाडा व उदयपुर जिले के कई गांवों के जलाशय पक्षियों की पसंदीदा सैरगाह हैं और इनमें शीतकाल के समस्त प्रवासी पक्षी आते हैं।

विदेशी शोधकर्त्ता भी आकर्षित:

वागड़ अंचल के अनूठे नैसर्गिक सौन्दर्य और जैव विविधता को देखते हुए न केवल स्थानीय बर्डवॉचर और अन्य पर्यावरण प्रेमी अपितु सात समन्दर पार से भी बड़ी संख्या में शोधकर्त्ता प्रतिवर्ष यहां की यात्रा करते हैं और यहां पर मौजूद पक्षियों और उनके प्रजनन स्थलों के बारे में जानकारी एकत्र करने के साथ ही जनजाति संस्कृति के साथ इन पक्षियों के तारतम्य को देखते हैं। वागड़ अंचल में सारस क्रेन के प्रजनन की बड़ी संख्या और अन्य स्टॉर्कक्स की अवस्थिति को देखते हुए जर्मनी के स्कॉलर बर्नर ब्राउन और इग्लेण्ड की शेरलॉन गत तीन वर्षो से लगातार आ रहे हैं और इन पक्षियों पर सतत शोध कर रहे हैं। विदेशी शोधकर्त्ताओं को देखकर स्थानीय बर्ड वॉचर और अन्य पर्यावरणप्रेमी भी उत्साहित हैं और वे भी इन क्षेत्रों में आने वाले प्रवासी परिंदों के अध्ययन में रूचि ले रहे हैं।

खतरे के निकट घोषित पक्षियों को भी रास आई आबोहवा:

नैसर्गिक सौन्दर्य से लकदक इस अंचल की आबोहवा अब खतरे के निकट घोषित पक्षियों को भी रास आ रही है। पिछले वर्षो में भारत में खतरे के निकट घोषित कई पक्षियों ने इस अंचल का रूख करते हुए यहां पर प्रजनन किया है। बोम्बे नेचुरल हिस्ट्री सोसायटी द्वारा किये गये सर्वे में भारत में खतरे के निकट घोषित कुल 795 में से 58 प्रजाति के पक्षी भारत में ही पाए गए हैं। इन 58 प्रजातियों में कुछ पक्षी ऐसे है जो राजस्थान के अन्य सरसब्ज स्थानों को छोड़कर वागड़ अंचल में आए है। यहां के बारहों मास भरे रहने वाले छोटे–छोटे अनगिनत जलाशयों की वनस्पति और उनके किनारों पर स्थित हरितिमा इन पक्षियों को बेहद रास आ रही है और यही वजह है कि कई पक्षियों ने यहां पर घोंसले बनाते हुए प्रजनन किया है और अपनी वंशवृद्धि की ओर अग्रसर हैं।

डूंगरपुर जिले में सर्वाधिक तादाद में खतरे के निकट घोषित व्हाईट आईबीस और पेन्टेड स्टॉर्क प्रजनन करते हैं। जिले के सागवाड़ा स्थित गमरेश्वर तालाब व गलियाकोट तो पेन्टेड स्टॉर्क के प्रजनन के लिए खास प्रसिद्ध हैं। इसके अलावा शहर के गेपसागर के किनारे, शास्त्री कॉलोनी क्षेत्र, जिले के बिछीवाड़ा, करौली, मेवाड़ा, धंबोला, गैंजी, गलियाकोट, भीलूड़ा, सागवाड़ा, बोड़ीगामा, खानन गांवों सहित सोम कमला आंबा बांध के जलभराव क्षेत्रों के किनारे बड़ी संख्या में भी इन पक्षियों के घोसलें देखे जा सकते हैं। इसके साथ ही वूली नेक्ड स्टॉर्क तथा ब्लेक नेक्ड स्टार्क द्वारा भी जिले के विभिन्न स्थानों पर प्रजनन पाया गया है।

बर्ड फेयर ने उभारा है पर्यटन मानचित्र पर :

डूंगरपुर जिले में गत वर्षो में आयोजित हुए बर्डफेयरों के कारण अब जिला बर्डवॉचिंग की दृष्टि से पर्यटन मानचित्र पर उभरा है। वृहद पैमाने पर आयोजित हुए इस बर्डफेयर में देश–प्रदेश के प्रतिवर्ष 100 से अधिक बर्डवॉचर्स व शोधार्थी डूंगरपुर पहुंचते हैं और यहां पर पक्षियों की उपस्थिति व प्रदूषणमुक्त आबोहवा से अभिभूत होते हैं।

पक्षी: अल्पज्ञात खतरे

प्रदीप जोशी

पक्षियों के आवास तथा प्रवास के दौरान ज्ञात खतरों पर चर्चाएँ कई बार हो चुकी हैं तथा बचाव के प्रावधानों पर विचार तथा क्रियान्वयन भी किए गए हैं। परन्तु प्रायः अल्पज्ञात खतरे विचार का विषय कम ही रहें हैं। इन अल्पज्ञात खतरों के परिणामस्वरूप पक्षियों के प्रजनन पर प्रतिकूल प्रभाव पड़ सकता हैं।

दृष्टिगोचर हुआ है कि पक्षियों के प्रजनन के समय भेड़ों के रेवडों का निष्क्रमण भी प्रायः होता है जो कि अण्डों तथा बच्चों के नष्ट होने का कारण बनते है। बहुत से पक्षी जैसे स्मॉल प्रेटिनकॉल (Small Pranticole), लिटिल रिंग प्लोवर (Little Ring Plover), रिवर टर्न (River tern), गजपांव (Black Winged Stilt), पनचीरा (Indian Skimmer) जमीन पर अण्डे देते हैं एवं भेड़ो के निष्क्रमण के दौरान उनको नुकसान पहुचने की संभावना रहती है।

दूसरा बड़ा खतरा तालाब के पेटे का प्रयोग आवाजाही के रास्ते हेतु करना भी है। गांव में जब तालाब का पानी कम होने लगता है तो ग्रामीण लम्बे रास्ते से बचने हेतु तालाब के पेटे को शार्टकट के रूप में काम में लेने लगते हैं। इससे भी अण्डों तथा बच्चों के कुचले जाने का खतरा रहता है। कई बार तो ट्रेक्टर आदि भी इस रास्ते गुजरते हैं जो कि अज्ञानवश अण्डों तथा बच्चों को नष्ट कर देते हैं।

तीसरा खतरा आवारा कुत्तों से बना रहता है जो कि अण्डों तथा बच्चों को अपना शिकार बना लेते हैं और कई बार देखा गया है कि वे पक्षियों के समूह पर भी आक्रमण करते हैं और अफरातफरी के दौरान पक्षियों को अपना शिकार बना लेते हैं।

चौथा खतरा अनुपयोगी सामग्री से होता है। अक्सर देखा गया है कि गांव में जब कोई उत्सव या कार्यक्रम होता है तो बची हुई खाद्य सामग्री तालाब किनारे डाल दी जाती है जिससे कौवे एंव कुत्ते आदि जीव आकर्षित होते हैं जो उस स्थान विशेष पर प्रजनन करने वाले पक्षियों एवं उनके अण्डों, बच्चों के लिए खतरा साबित होते हैं।

पाँचवा खतरा कुछ पारम्परिक घुमन्तु जातियों में शिकार का रिवाज है। ये लोग अपने साथ शिकारी कुत्ते रखते हैं तथा उन्हें प्रशिक्षित भी किया जाता है जो आदेश मिलते ही शिकार के लिए दौड़ पड़ते हैं और शिकार मालिक को लाकर देते हैं। उदयपुर के फतहसागर आदि झीलों पर अक्सर देखा गया है कि पर्यटक सेल्फी लेने के लिए अन्जाने में झील के पैटे तक चले जाते हैं जहाँ अण्डे तथा बच्चे होते हैं।

सुरक्षा उपायः

ग्रामीणों, पशु पालकों को समय–समय पर जागरूक किया जाए कि वे तालाबों के किनारें चलते समय सचेत रहें तथा पालतू पशुओं को वहाँ से गुजारने से बचें। साथ ही यदि तालाब झीलों के किनारे बाड़ बना दी जाए तो सुखद परिणाम निकल सकते हैं।

चम्बल स्थित घडियाल अभयारण्य के नजदीक पक्षियों के प्रजनन स्थल पर वन विभाग द्वारा गार्ड की नियुक्ति की जाती है जो कि कुत्तों से सरिसृपों एवं पक्षियों के अण्डों तथा बच्चों को बचाने की निगरानी करते हैं। यदि ऐसा प्रयास किया जाए तो प्रभावकारी परिणाम आ सकते हैं।

बची हुई खाद्य सामग्री के उचित प्रबन्ध हेतु लोगों को जागरूक किया जाए तथा तालाब के किनारे फैंकने पर सख्त पाबंदी हो तो अवांछित स्थिति से बचा जा सकता है।

पक्षियों के शिकार पर पूर्ण पाबंदी लगे तथा उचित दण्ड की व्यवस्था की जाए।

पक्षी विहार : यात्रा वृत्तांत

राजलक्ष्मी जोशी
डायरेक्टर–ऐ.पी.बर्डिंग, उदयपुर

घना पक्षी विहार भरतपुर यह नाम मेरे लिए बचपन से ही जाना पहचाना था परन्तु उसे देखने का कभी अवसर नहीं मिला। लेकिन आज जीवन के 35 वर्ष पूर्ण हो जाने के पश्चात् यह सुनहरा मौका आ ही गया। स्कूल की कुछ पुरानी यादें ताजा हो गई जब आठवीं कक्षा में हिन्दी विषय के एक अध्याय में पढे हुये घना पक्षी विहार के वर्णन को जीवंत कर दिया। मैं इस यात्रा को लेकर अति उत्साहित थी।

बचपन से ही पक्षियों ने मुझे आकर्षित किया। फैशन डिजाइनिंग के विषयों की पढ़ाई ने मुझे आधुनिकता के साथ चलना तो सिखाया परन्तु आधुनिकता की यह चमक भी मुझे प्रकृति से ज्यादा दूर नहीं रख पाई। प्रकृति की सरलता, सौम्यता, असीम सुन्दरता एवं शांत वातावरण ने फैशन की चमक को धुंधला कर दिया और आज घना पहुंच कर ऐसा लगा कि बचपन का मेरा कोई सपना पूरा हो गया। अपने आस–पास के विभिन्न रंगों वाले छोटे–बड़े पक्षी मेरा ध्यान सदैव अपनी ओर आकर्षित करने में सफल रहे हैं। पक्षियों से जुड़ी सामान्य जानकारी से तो मैं परिचित थी कि पक्षी अनाज एवं कीड़े–मकोड़े खाते है एवं पानी पीते है। मैं पिछले एक दशक से पक्षियों को देखने एवं उन्हें पहचानने में काफी समय व्यतीत कर रही हूँ परन्तु घना पक्षी विहार देखने के पश्चात् मुझे पक्षियों से जुड़े कुछ ऐसे रोचक तथ्यों की जानकारी प्राप्त हुई जो आज मैं अपने इस यात्रा वृत्तांत के माध्यम से अपने सभी मित्रों से साझा कर रही हूँ।

घना राष्ट्रीय उद्यान पहुंच कर हमनें पक्षी विहार के लिए रिक्शा किराये पर लिया और उसी में हमने घना विहार का भ्रमण भी किया। रिक्शे वाले का नाम था भपेून्द्र। उसने हमें सर्वप्रथम डॉ. सलीम अली 'इन्टरप्रेटेशन सेन्टर' दिखाया और बताया कि किस प्रकार डॉ. सलीम अली ने पक्षियों के लिये अपना पूरा जीवन लगा दिया था और उसने डॉ. असद रहमानी साहब का जिक्र भी अपनी बातों में किया कि वे भी किस प्रकार पक्षियों के लिए समर्पित है।

सर्वप्रथम हमनें फ्लेमिंगो के कई जोड़े देखे उनकी तस्वीरे भी ली तभी भूपेन्द्र ने बताया कि फ्लेमिंगो का यह गुलाबी रंग प्राकृतिक नहीं है यह एक विशेष प्रकार की शैवाल खाने से उत्पन्न होता है। फ्लेमिंगो जीवनपर्यन्त एक ही साथी के साथ रहते है और यह समय 50 वर्ष या उससे भी अधिक हो सकता है। इसके पश्चात् तो एक के बाद एक रोचक जानकारियों का सैलाब आ गया।

बार–हेडेड गूज सर्वाधिक ऊँचाई पर उड़ने वाला पक्षी है। प्रति वर्ष ठण्ड के मौसम (अक्टूबर–मार्च) में भारत में आते है और यह अंग्रेजी अक्षर वी (V) की आकृति बनाकर समूह में उड़ते है और तभी हमें यह ज्ञात हुआ कि कुछ पक्षी ऐसे भी होते है जो पंख होते हुए भी नहीं उड़ सकते जैसे ऐमू, ऑस्ट्रीच, कीवी इत्यादि।

इसके पश्चात् हमने उल्लू देखा तब उसके बारे में एक रोचक तथ्य सामने आया कि उल्लू अपनी गर्दन 360° तक घुमा सकता है परन्तु वो अपनी आंखों को घुमाने में अक्षम होता है और यह हल्की हलचल से अंधेरे में भी अपने शिकार को पकड़ सकता है। वहीं कीवी नामक पक्षी देखने में असमर्थ होता है परन्तु वह गंध के माध्यम से शिकार को पकड़ सकता है। पक्षियों की आंखों के बारे में चर्चा करते हुए हमें यह पता चला कि पक्षी अपनी आंखों को सिर के 50 प्रतिशत तक घुमा सकते है जबकि मनुष्य पांच प्रतिशत तक ही घुमा सकता है।

कोयल पक्षी की मधुर आवाज जब हमारे कानों मे पड़ी तो उसे देखने की उत्सुकता हुई तभी भूपेन्द्र ने हमें इस बात से अवगत कराया कि यह मधुर आवाज नर कोयल की है जो मादा को आकर्षित करने के लिए निकालता है तथा सुरक्षा को ध्यान में रखते हुए कोयल अपने अण्डे कौवे के घौंसलो में देती है। इस तथ्य से हमें कोयल के चातुर्य का ज्ञान हुआ।

पंख फैलाकर नाचते हुए मोर को देखकर हमनें जाना कि यह नर मोर है जो मोरनी को आकर्षित करने के लिए अपने सुन्दर पंख दिखाता है और नृत्य करता है जिस प्रकार मोर–मोरनी के लिए नृत्य करता है ठीक वैसे ही राजस्थान का राज्य पक्षी गोडावण भी मादा को आकर्षित करने के लिए नृत्य करता है और अन्य नरों की अपेक्षा स्वयं को बलशाली सिद्ध करने का प्रयास करता है। गोडावन के प्रजनन काल में उसके गर्दन पर एक थैलीनुमा लटकने वाली संरचना दिखने लगती है।

भारत में पक्षियों की लगभग 1200 प्रजातियाँ पायी जाती है जो दुनिया में उपस्थित पक्षियों की 13 प्रतिशत है। घना में पक्षियों के साथ थार में उपस्थित पक्षियों की भी चर्चा हुई जब एक चौंकाने वाली बात सामने आई कि थार जो राजस्थान से पाकिस्तान तक फैला है वहाँ 'स्टोलिज़का बुश–चेट'' नामक पक्षी केवल यहीं पाया जाता है जो इस क्षेत्र के लिए एण्डेमिक पक्षी है।

पक्षी हमारे दैनिक जीवन को जिस प्रकार प्रभावित करते है एवं हमारे मित्र बनकर हमारी सहायता करते है इसका ज्ञान भी हमें प्राप्त हुआ। जैसे गिद्ध पक्षी मरे हुए जानवरों को खाकर हमें बीमारियों से बचाने एवं वातावरण शुद्ध रखने में भी सहायक होते है वहीं कुछ पक्षी कीड़े–मकोड़े एवं चूहों को खाकर किसानों के मित्र होने का फर्ज निभाते है। यह पक्षी हमारे परिस्थितिकी तंत्र का एक महत्वपूर्ण हिस्सा है। इनकी उपयोगिता एवं महत्ता के साथ ही रोचक जानकारी ने मुझे पक्षियों के और करीब कर दिया।

इस यात्रा वृतांत एवं पक्षियों से संबंधित जानकारी को आप से साझा करते हुए मुझे बहुत खुशी का अनुभव हो रहा है और आशा है यह जानकारी मेरी तरह मेरे सभी मित्रों के लिए उपयोगी सिद्ध होगी।

परिंदों की दुनिया के मेरे अभूतपूर्व संस्मरण

डॉ. शशि शर्मा

अक्सर कहा जाता है कि व्यक्ति में कुछ गुण जन्मजात होते हैं। शायद वन्य जीवन के प्रति मेरा आकर्षण भी उन जन्मजात गुणों में से एक है। बचपन से गोरैया, बुलबुल, टेलर बर्ड, हुदहुद, कोयल आदि पक्षियों के विभिन्न क्रिया–कलापों को बड़ी उत्सुकता से निहारा करती थी। तब कभी ख्याल भी नहीं आया था कि पक्षी जगत से इतनी गहराई के साथ जुड़ जाऊँगी और "वन्य जीवन फोटोग्राफी" का तो बस नाम ही सुना था परन्तु अनायास जिन्दगी में ये ऐसे आ गए जैसे जीवन को एक दिशा मिल गई हो। मेरे लिये यह महज एक शौक ही नहीं अपितु स्वयं को जानने और पहचानने का एक अवसर है। जब कैमरे के साथ प्रकृति के मध्य होती हूँ तो अपने सहज और स्वाभाविक रूप में होती हूँ। प्रकृति हर बार मुझे अत्यन्त खूबसूरत, अभूतपूर्व और रोमांचक घटनाओं से साक्षात्कार कराती है। इनमें से कुछ अनुभव यहाँ साझा कर रही हूँ।

उस दिन, दिनांक 15.05.2017 को अलसुबह उल्लुओं को शूट करने के उद्देश्य से मैं अपने गंतव्य स्थान पर पहुँच चुकी थी। कुछ ही देर हुई थी कि मेरे सामने से "व्हाईट थ्रोटेड किंगफिशर" चोंच में कुछ दबाए उड़ता हुआ तनिक दूर एक पेड़ पर जा बैठा। 'किल' के साथ 'किंग' के फोटो मिलने की सम्भावना के चलते कैमरा लिए उस दिशा में दौड़ पड़ी। जब अपने लेंस के जरिए मैंने उसे देखा तो स्तब्ध थी। उसने चोंच में नन्हा सा चूहा पकड़ रखा था वो भी गर्दन से और उसकी आँखें बाहर निकली हुई थीं। शायद इसी अवस्था में उसके प्राण निकले होंगे। पर 'किंग' यहीं पर नहीं रूका उसने चूहे को सिर से पैर और पैर से सिर तक न जाने कितनी बार घुमा–घुमा कर शाख पर पटका जब तक कि संभवतः उसकी कुछ हड्डियांटूट न गई हो एवं वह निढाल न हो गया हो (मेरी समझ में ऐसा इसलिए किया गया होगा कि किंग चूहे को आसानी से निगल ले)। मैं जब यह शॉट्स ले रही थी तब मेरे विचारों में भी उतनी ही उथल–पुथल थी जितनी सामने के दृश्य में। एक सीन, हम तीन प्राणी, तीनों के विचार (चूहे के तो विचार थे ही कहाँ वह तो बेचारा परलोक सिधार गया था, सो मैं ही उसके हिस्से का काम कर रही थी) सर्वथा भिन्न थे। किंग भरपेट भोजन पाकर आनंदित था, एक काल का ग्रास बन चुका था और मैं प्रकृति के नियम को स्वीकारना सीख रही थी। चूहे के लिए मन दुखी था पर किंग से नाराज कैसे हो सकती थी और इस सबसे अलग मेरे लिए यह अप्रतिम अनुभव था.....।

उड़ते परिंदों को "कैद" करना मेरे लिए अत्यधिक दुष्कर और उतना ही चुनौतीपूर्ण कार्य रहा है। भिन्न–भिन्न पक्षियों पर इसे आजमा चुकी हूँ परन्तु मेरे लिए यह अभी भी अनेक कारणों से बहुत कठिन है। पहला, इनका तेज गति के साथ उड़ना और दूसरा, उस गति के साथ कैमरे को भारी लेंस के साथ घुमाना, जिसे उठाना ही मेरी क्षमता के लिए पर्याप्त है। तीसरा कारण जब लेंस "जूम" करती हूँ तो क्षेत्रफल सीमित हो जाता है और नहीं करती तो शॉट में पक्षी दूर हो जाता है। चौथा अगर यह सब हो भी जाए तो फोकस होते–होते पक्षी गायब!! इन सब चुनौतियों के चलते न जाने कब कैसे 'रिवर टर्न' को इस कार्य के अभ्यास के लिए चुन लिया। संभावित कारण रहा होगा कि यह बार–बार चक्कर काटते हुए एक ही जगह पर शिकार (मछली) ढूँढती है (नहीं जानती कि मैं इसके लिए स्त्रीलिंग का प्रयोग क्यों कर रही हूँ), परन्तु जब–जब मैंने यह प्रयोग करना चाहा

तब–तब मनमाफिक परिणाम नहीं मिले। इसलिए कभी–कभी तो मैं खीज उठती थी क्योंकि 'गियर' पकड़े–पकड़े मेरे हाथ बुरी तरह दुखने लगते थे। खैर फिर भी कोशिशें जारी थीं और इस बीच कुछ समय पहले झालावाड़ जाने का मौका मिला। स्थानीय पक्षियों के शॉट्स मिलने की तमन्ना लिये अगले दिन एक और 'बर्डर' साथी के मार्गदर्शन में निकल पड़ी पास के वन्य–क्षेत्र में। लगभग तीन घंटे घूमने के बाद भी बहुत अच्छा कुछ मिला नहीं तब वापस लौटने का निर्णय किया। लौटते वक्त अचानक साथी बर्डर ने तत्परता से कहा, "मैडम! रिवर टर्न के फ्लाइट शॉट्स लीजिए"। बड़े बेमन से कैमरा उठाया कि देखती हूँ एक रिवर टर्न सीधे मेरी ही ओर आ रही थी। क्षण भर में मेरा ठंडा पड़ गया उत्साह लौट आया था। मैं फिर मनोयोग से जुट पड़ी थी, शॉट्स लेने में और नतीजा सामने है.....!

इस वर्ष योजना बना रही थी अक्टूबर माह में ताल–छापर जाने की पर यह संभव हो पाया नवम्बर माह में। काले हिरणों के लिए प्रसिद्ध यह स्थान शिकारी पक्षियों की उपलब्धता के चलते पक्षी प्रेमियों की भी पसंदीदा जगह है। अतः मैं भी उन्हीं से मिलने की उत्सुकता लिये वहाँ पहुँच गयी थी। सबसे पहले नज़र आने वाला पक्षी था "स्टेप ईगल"। जीवन में पहली बार इतना बड़ा ईगल देख रही थी, जिसे देखकर क्षण भर के लिए मेरी सांस रूक गई थी। जब पुनः चेतना लौटी तो आनन्द और उत्सुकता चरम सीमा पर थे, यह सोचकर कि मुझे क्या–क्या और मिलने वाला है। परन्तु अत्यन्त विकट समस्या यह थी कि मुझे शिकारी पक्षियों की अधिक पहचान नहीं थी और न ही मैं उनमें ज्यादा अंतर कर पा रही थी। ऐसे में एक ही उपाय बचा था वह यह कि जो सामने आये उसके शॉट्स ले लूँ फिर पक्षीवेत्ताओं से पूछूँ कि "भई, ये है कौन?" ऐसे ही लिए गए एक शिकारी पक्षी की पहचान कराई तो ज्ञात हुआ कि वह 'बोनलीज् ईगल' था। यह जानकर मुझे वैसा ही महसूस हुआ जैसा आप तब महसूस करते जब आपने किसी सुविख्यात व्यक्तित्व से मिलने का सपना संजो रखा हो तथा उसे सिर्फ तस्वीरों में देखा हो और वह अनायास एक साधारण व्यक्ति के रूप में आपसे मिले, साथ बैठे, बात करे और आपको उसके जाने के बाद पता चले कि वह कौन था.....।

पक्षी जगत ना केवल सौन्दर्य की मिसाल है वरन् यह संगीत और नृत्य कला प्रदर्शन में भी अनूठा है। यह 'कानन सुनी' नहीं 'आँखन देखी' कह रही हूँ। इनका 'प्रणय नृत्य' प्रेमपूर्ण संवेदनाओं को अभिव्यक्त करने का अत्यन्त मनोहारी माध्यम है। ऐसा ही अद्‌भुत एवं रसमय प्रणय नृत्य होता है सारस क्रेन युगल का, जिसमें दोनों की लयात्मक भंगिमाएँ, नजाकत से भरपूर अंग संचालन देखने वाले को भाव विभोर कर देता है। नृत्य में सम्मिलित है अलमस्त परन्तु सधे कदमों की लयबद्ध चाल, गर्दन का कलात्मक संचालन मानो नर, मादा के समक्ष नमन कर रहा हो। दोनों के मध्य बेजोड़ सामन्जस्य, मधुर एवं कोमल संवेदनाओं का नाटकीय प्रदर्शन एवं बेहतरीन अंग संचालन दर्शनीय है। भरसक प्रयत्न करने के उपरान्त भी यह दृश्य मेरे लिए वर्णनातीत है। इसके आकर्षण व आनन्द को वही समझ सकते हैं जिन्होंने यह दृश्य देखा हो।

"Importance of Environmental Education"

Bird festival a three day program is being organized with an aim of scaling up bird awareness amongst the mass. Such festivals provide a common platform for people of all ages where they can come close to nature and learn to live in harmony with it. These programs form an integral part of informal environmental education that can imbibe the minds towards feeling of kinship with animals in nature and maintaining the hygiene in surroundings. Bird watching activity and various competitions for students on one single platform provide opportunity to learn about colorful world of birds and the role of wetlands. Here they get an opening to show their skills and ability and benefit through the guidance of various experts from different fields.

ARUN SONI
Officer-In-Charge
WWF-India, Udaipur Division

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"The corporate vision instates the environmental and social sustainability as the backbone of its economic growth". We have an exclusive policy on Biodiversity that focuses on conserving species of high biodiversity value and mitigating risk to high priority conservation areas in the vicinity of our operations. We used the Integrated Biodiversity Assessment Tool (IBAT) mapping tool for the screening process and categorized our operations as high/medium/low according to the risk category they fall in.

All our sites have Biodiversity Management Plans (BMP) in place. We have implemented extensive Green belt (1.5 million trees) in and around our operations. Nurseries for various endemic and medicinal (Ayurvedic) plants have been set up at our Head office, Rampura Agucha and Kayad Mine & well-designed conservation plan to preserve the national bird Pavocristatus (Indian Peafowl) at Kayad mines. We have also created butterfly park at our Pantnagar Metal Plant (PMP) and Head office. We are also a signatory of the IBBI (Indian Biodiversity Business Initiative), Tree inventorization carried out at Head office, Rampura Agucha and Chanderiya, the results suggested that enumerated 2,94,528 trees contribute to 3283 Kg of carbon sequestration. To create net positive impact on biodiversity we are also taking initiatives beyond our boundary and partnering with UIT Udaipur for regeneration of two hills Ratnagiri and Kalimagri, supporting Forest department in development of Sajjangarh Biological Park, plant distribution to nearby villages. Mass plantation carried out in a forest area of 75 Ha in Zawar and planted 23,500 saplings through Van Suraksha Evam Prabandh Samiti.

Nurturing a Green Home: One of the many Birdhouse clusters placed all around at various campuses. A multitude of birds can be seen utilizing these houses, and the feed and drinking water provisions made for the winged wonders. Squirrels and other tree loving creatures are welcome too.

Butterfly park-PMP

Seeds , Bird feeders and Bird Huts distribution on Environment Day

1

2

3

4

5

1. A **Shikra** photographed at CRDL
2. A **Greater Coucal** photographed at Residential Colony at Chanderiya.
3. A **Golden Oriole** photographed near Zinc Colony.
4. A **Indian Roller** photographed at Dariba Mine.
5. A **pair of Wire Tailed Swallows** photographed at Mansi Vakal Dam

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