



# UP State Biodiversity Board

## BIODIV News

April-June, 2010  
Volume 1, Issue 3

A Quarterly e-Newsletter



*Rauvolfia serpentina*

# A Quarterly e- Newsletter of UP State Biodiversity Board

## *Editorial*

### **Esteemed Readers**

*The Earth as we all know harbors life in the most diverse forms imaginable. We think all forms of life are not only marvelous, but also have extraordinary economic value that mankind groves at it peril. Quantity of species on this planet has been dropping dramatically, as human demands over run the biocapacity of the Earth. This issue includes the estimated faunal diversity of India (Jan 2009) that shows 91,484 species in India, 7.51% of the world's total.*

*In Dec 2000, the UN general assembly adopted 22 May as International Day for Biological Diversity (IDB). The theme for this year was "Biodiversity, Development and Poverty Alleviation". This issue contains a brief report on the National Conference organized this year.*

*Like all of you we too have been reading dire reports of declining species for many years now. The sad fact is that the only species that are likely to endure are the ones we humans manage to*

*pay attention to. In an article with beautiful pictures, Shri S.C.Chaudhari and Shri D.Basu draw our attention to about 51 birds near our homes.*

*The project "Survey, Mapping and Documentation of Floristic Diversity and Antiquity of Vegetation in Lucknow and adjoining areas " done by Dr. D .C. Saini , Birbal Sahani Institute of Paleobotany has recorded 1299 plant species in Lucknow - an additional 94 species as compared to the previous flora of Lucknow.*

*An effort has been made to include important press clipping and news events on biodiversity at International, National and State level. We hope you enjoy reading the issue. As usual comments suggestions are always welcome.*

*Let us recognize that biodiversity is Life-Our life: Let us act now to preserve it, before it is too late.*

**Editors**

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# **1. Brief Report of IDB-2010 Celebration and National Conference on "Biodiversity, Development and Poverty Alleviation" Organised by U.P.State Biodiversity Board, Lucknow on May 22, 2010**

The Uttar Pradesh State Biodiversity Board celebrated the International day on Biological Diversity (IDB-2010) on 22-05-2010 at the Dr. Ram Manohar Lohia National Law University Campus, Lucknow. On this occasion, a one day National Conference on "Biodiversity, Development and Poverty Alleviation" was also organised in which more than 450 delegates from various research organisations/Institutes, Universities, NGO's and Officers from U.P. State Forest Department participated. The conference was inaugurated by Padamshree Dr. P.Pushpangadan, Director General, Amity Institute for Herbal and Biotech Products Development, Thiruvananthapuram, Kerala.

Shri D.N.S. Suman, Principal Chief Conservator of Forests, U.P. welcomed all the dignitaries and delegates of conference and delivered the welcome address. He said that forest department is making continuous efforts to uplift the economic status of local people living on the fringes of forest through implementation of different projects on conservation of flora and fauna *vis-à-vis* biodiversity conservation. According to him, the conservation of biodiversity can be achieved only through sustainable development and scientific utilization of biological resources on the planet.

In his inaugural speech, Dr.Pushpangadan expressed that fast and unregulated urbanisation is threatening traditional ways of life and increasing pollution, due to lack of understanding between

industry, community and institutions carrying out research work. Uncontrolled population growth adds to pollution. Most of the population explosion is expected to take place in the biodiversity rich, developing countries, like the Caribbean, the Philippines, Sri Lanka and the Western Ghats of India.

Shri Chanchal Kumar Tewary, Principal Secretary (Forests) and Chairman, U.P.State Biodiversity Board, in his talk stated that biodiversity is directly linked with our livelihood. It is our prime responsibility to conserve biodiversity on priority for sustainable use of bioresources.

Speaking on this occasion, Secretary of the U.P.State Biodiversity Board, Shri Pawan Kumar said that people living on the fringes of forest reserves, near biodiversity rich regions and tribal areas in Sonbhadra would be apprised about the importance of biodiversity. Depletion of biodiversity directly affects agriculture due to negative impact on water cycle and fertility of soil. It also results in loss of habitat for wildlife and fodder for livestock. Shri Pawan Kumar, in his presentation also emphasised the objectives of the National Conference as well as the efforts made for conservation of floral and faunal biodiversity so far.

Shri Brij Lal, Addl. Director General of Police, Law and Order, U.P., in his talk, stated that there is an urgent need to make aware the villagers/tribals living in the fringes of forests *vis-à-*

*vis* there participation in biodiversity conservation programme. He emphasised that the traditional food species, which are at the verge of extinction, need conservation for poverty alleviation and well being of the tribals dwelling in the forests.

Prof. Balraj Chauhan, Vice Chancellor of RMLNLU, Lucknow in his lecture informed that we have ample of literature regarding knowledge of traditional medicines, natural resource conservation etc. The need of the hour is to strengthen the same legally and economically for sustainable development. In the inaugural session, a souvenir on the theme of the conference was also released. It carried forty articles in about 168 pages.

In the first Technical Session of the conference, Dr. Ram Krishna, Director, Zoological Survey of India in his presentation, discussed the bioresources including genetic, organism and ecosystem resources and their sustainable development. Besides, he gave brief account of genetic, species and ecosystem diversity. He emphasised that we must develop strategies to protect biodiversity if we want to achieve poverty eradication and sustainable development. Biodiversity is the basis for achieving sustainable development. The loss of biodiversity through the reduction of crop and livestock genetic diversity and the decreased availability of wild biological resources threatens food and livelihood security for the poor. Local access to genetic resources (of plants, animals or micro-organisms) and the equitable sharing of the benefits derived from their utilization are important to the sustainable use of

biodiversity and to poverty alleviation and development. Benefits derived from the research, transformation or commercialization of genetic resources should be shared equitably with the people who have preserved the resources utilized and the indigenous knowledge of their benefits.

Dr. K. Venkataraman, Scientist, Zoological Survey of India, Chennai delivered his guest lecture on emerging prospective on biodiversity and its conservation in India. He described different ecosystems and biogeographic zones in our country. He gave a brief account of nutritional need of growing global population and conservation of biodiversity and sustainable use of natural resource. Besides, he highlighted the Convention on International Trade in Endangered Species of Flora and Fauna, role of CBD and major regulatory changes in Biological Diversity Act.

Shri Yeshwanth Shenoy, Legal Advisor, National Biodiversity Authority in his presentation gave a brief account of evolution of the international concern on biodiversity conservation and sustainable development followed by India's biodiversity profile and Biological Diversity Act, 2002. Regarding development and poverty alleviation, he stated that there in need to identify bioresources in the state; identify industry usage and supply from state; identify mechanisms to supply bioresources directly to the industry; identify local usage by communities/people; validate the knowledge at state research facilities; identify the possibility of IP Protection; market through licensing agreements these IP to the industry. Dr.

N.K.Singh, National Professor, ICAR, New Delhi in his lecture expressed the role of genomics and search for novel genes in rice germplasm resource. He described the importance of rice germplasm in India.

In the second Technical Session, there were four guest speakers. Shri.Akihiko Sasaki, Team Leader, Nippon Koei Co., Ltd., Tokyo, Japan and Project Management Consultant for UP-PFMPAP in his presentation described different components and objectives of the project entitled, "Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project (UP-PFMPAP)". He spoke on Conservation of Biodiversity Hotspots, Ecotourism Development, Management of Protected Areas and Eco-development activities like Community Development and Livelihood Security.

Prof. Dr. Arvind Gupta, Krishnamurti Foundation, Rajghat Education Centre, Rajghat Fort, Varanasi in his lecture on "Poverty to Poverty Alleviation/ Development –Imperatives" expressed that knowledge from ecosystem theory will have to be used for organization and conduct of individual/ societal, economic and non-economic activities. We have to narrow down the gaps between the rich and the poor, the well-fed and underfed, the market and non-market goods and services and the literate and illiterate.

Dr. (Smt.) Usha Lachungpa, Scientist, Sikkim Biodiversity Board in her presentation on "Sikkim: Biodiversity & Biopiracy issues: In context of Development & Poverty Alleviation" stressed on some major issues like increasing

presence of invasive plant species, challenges: quality / quantity of "ecotourism", role of environmental NGOs and organising Awareness Generation National Environment Campaign regarding Sikkim's threatened biodiversity.

Dr. J.P.Singh, Chief Conservator of Forests, Wildlife, Berhampur, Orissa in his presentation on "Mass Nesting and Conservation of Olive Ridley Sea Turtle -An Unique Biodiverse Species of Orissa" gave a brief account of rich bio-diversity existing in forests of Orissa state. According to him, there are 2754 plant species, out of which 29 are endemic. Also included are, 120 NTFP species, 36 mangrove species, more than 100 medicinal plant spp. and 144 rare & endangered spp. He focussed his talk on Leatherback sea turtle which is the largest having average length about 3.7 metres and Kemp's Ridley Sea Turtles (*Lepidochelys kempii*) being the smallest. The 2nd smallest is Olive Ridley Sea Turtle. He further emphasised the threats to Olive Ridley Turtle and need as well as strategy for its protection and conservation. In the last of this session, there was a folk song on biodiversity conservation by Acharya Chandra Bhushan Tiwari. Besides, an exhibition on the theme of International Biodiversity was also organised in which the tribals from Vindhyan, Bundelkhand region and Terai region displayed their livelihood and traditional medicines of the region. There was also a photography exhibition related to various aspects of biodiversity conservation in which the winners were awarded prizes and citation.

*Images*  
**Photo Gallery**

**22<sup>nd</sup> May, 2010**



Hon'ble Chief Guest Dr P. Puspangdan ,  
 DG, AINBPD, Thiruvananthpuram ,  
 releasing the Souvenir



A view of Exhibition on the theme of biodiversity by the tribals from Vindhyan, Terai and Bundelkhand region



Dr. P. Puspangdan ,  
 DG, AINBPD, Thiruvananthpuram



Shri Chanchal Kumar Tewary, IAS  
 Chairman, UP State Biodiversity Board



Shri Brij Lal, IPS,ADG (Law & Order)  
 Uttar Pradesh



Prof. Balraj Chauhan,  
V.C., Dr. RMLNLU



Dr. Rama Krishnan, Director,  
Z.S.I., Kolkata



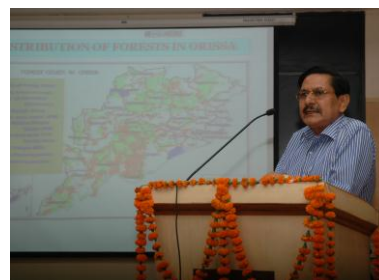
Dr. K. Venkataraman, Scientist  
Z.S.I., Chennai



Shri Pawan Kumar,  
Secretary , Forests /  
U.P. State Biodiversity Board



Ms. Usha Lachungpa,  
Sr. Research Officer,  
Sikkim Biodiversity Board



Dr. J P Singh, CCF, Orissa



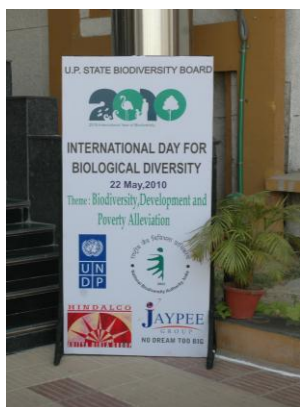
Shri Akihiko Sasaki,  
Team Leader UP-PFMPAP, Nippon,



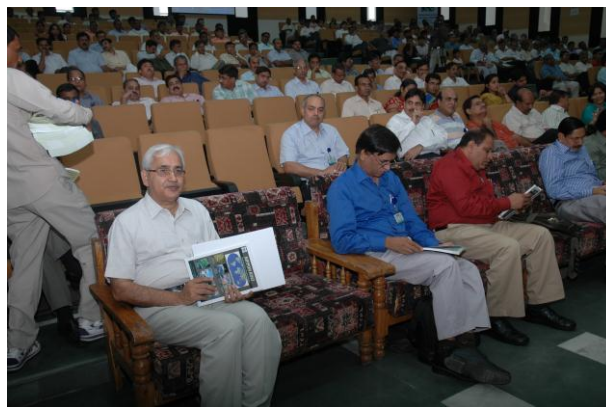
Dr. N.K. Singh ,  
Pr. Scientist, Biotechnology, IARI,



Shri Yeshwanth Shenoy,  
Law Expert, NBA



General view of IBD-2010 Conference



Shri Chandra Bhushan Tiwari



## 2. Workshops /Conferences /Trainings /Tours and Exposure/Field Visits

1. Lakhimpur Kheri U.P. 13-14<sup>th</sup> April 2010. Sri R.K. Dubey, A.C.F, Sri Ashok Kashyap, Dy. Ranger, Sri K.K. Tiwari, Dy. Manager (System), and Sri Satyendra Bahadur Singh, Forest Guard of the Board visited Lakhimpur Kheri to record the opinion of traditional healers in report to evolve benefit sharing mechanism for traditional medicine and its associated knowledge. They interviewed different types of traditional medicine practioners of different localities.
2. NBPGR (ICAR), PUSA, New Delhi-17th April 2010. National Workshop on FAO sponsored project on "**Establishment of the Information Sharing Mechanism for Monitoring the Implementation of Global Plan of Action** " organised jointly by National Bureau of Plant Genetic Resources (ICAR) and FAO at New Delhi. Dr. Ram Jee Srivastava, Sr. Scientist participated in the workshop.
3. N.B.A. Chennai, 22 April 2010- Shri Pawan Kumar, Secretary, U.P.State Biodiversity Board attended the **Workshop cum meeting on Biodiversity Conservation-Benefit Sharing Mechanism"** organised by National Biodiversity Authority, Chennai.
4. Deptt. of Geography, National P.G.College, Lucknow- 05th June 2010. Workshop on **The World Environmental Day**. Dr. Ram Jee Srivastava, Sr. Secientist attended the workshop as Guest of Honour and delivered a talk on "**Climate Change, Urban Pollution-Crisis and Bioremediation.**"
5. Ministry of Environment and Forests, GoI, New Delhi-16-18 June 2010. Brain Storming Meeting on Biodiversity Conservation with NBA, SBBs and MoEF at New Delhi organised by National Biodiversity Authority, Chennai. Shri R.K. Dubey, Astd. Conservator of Forests and Dr. Ram Jee Srivastava, Sr. Scientist attended the meeting.

### 3. BIRDS NEAR OUR HOMES

By Suresh Chaudhari and Dhruvajyoti Basu

Naturalists sometimes travel long distances with great difficulty to inhospitable places, take all sorts of risks and tolerate extreme discomforts to explore and study nature and wildlife. But, nature can sometimes be observed quite easily and comfortably as well. Our city parks are quite alive with birdlife, as I have discovered from the balcony of my house at Mahanagar in Lucknow; a city where some 125 species of birds have been recorded. Considering that in our vast country, from the misty forests of the north east to the steamy mangrove swamps of Sunderbans, from the snowy heights of the mountains of Kashmir and Ladakh to the maze of the backwaters of Kerala, from the beaches that line our sea coasts to the endless monotonous Gangetic plains of northern India and from the rain forests of the Western Ghats to the deserts of Rajasthan, the total number of birds recorded is 1228, then the 125 birds spotted in and around Lucknow city, represent 10.7 % of this remarkably huge avian diversity of our country, which is undoubtedly pretty good for an urban area.

Coming back to the park in front of my house; it was just a triangular plot of land, barren and dusty, without grass, hedges or trees, when we moved there in 1977. The only birds to be seen were house and jungle crows, sparrows, the common Mynah, the Brown rock chat and few swifts and swallows. These used to come to the garbage heap there in search of insects and tidbits. Apart from these, the Ashy prinia would sometimes be seen among the potted plants that people kept in their homes. My father was a Forest Officer and falling in line with him, I too obtained a dozen and half saplings from the departmental nursery and planted them in that dusty park in 1990. The saplings were those of the Amaltas (*Cassia fistula*), Australian babool (*Acacia auriculiformis*) and Neem (*Azadirachta indica*). Apart from the trees I planted, a seed of the Semal or Silk-cotton tree (*Bombax cieba*) also took root without any help from me but when I saw it coming up, I made a *thaal* or pan for it and would water it as well. To make it grow quickly, I trimmed away many of the



Brahminy Mynah



Grey-headed Mynah



Grey-Hornbill

branches that sprouted from the base of the trunk, which made it rise rapidly and the sapling became a young tree of 3 metres height in just two years. The uninvited Semal, proved to be a big attraction for the birds and it was visited by 3 parakeets the rose-ringed, the blossom-headed and the great Alexandrine; 2 bulbuls the red-whiskered and the red-vented; 2 barbets the brown-headed and the brightly colored coppersmith and the Magpie robin. When the Acacias started to burst into their yellow blooms, purple sunbirds appeared from somewhere and hovered over the blooms to suck their nectar. Five striped palm squirrels also hid noisily among its dense foliage chattering out their alarm, courtship and territorial cries.

Meanwhile the semal tree grew rapidly; its trunk became stouter and it reached a height of nearly 5 metres before it was 5 years old. Now it became a home or roost for 4 more species of Mynas; these were the pied, the brahminy, the grey-headed and the bank mynas; 3 species of doves; the collared, the brown and the spotted, which nested on it; the tree pie and the drongo. While the common and the pied mynas stayed and nested in the park, the brahminy, bank and the grey-headed mynas arrived when the semal flowered and left



Rose-ringed Parakeet

when this was over and green leaves filled out the naked branches. Some reptiles also invariably live in human habitations and I would see skinks and garden lizards. I once saw a rat snake but when all ground got covered with tar or cement, snakes probably found the going difficult and were rarely seen if at all. The small mongoose was also seen but it actually moved back and forth between the park and the covered storm water drains, where they led secret lives within their recesses.

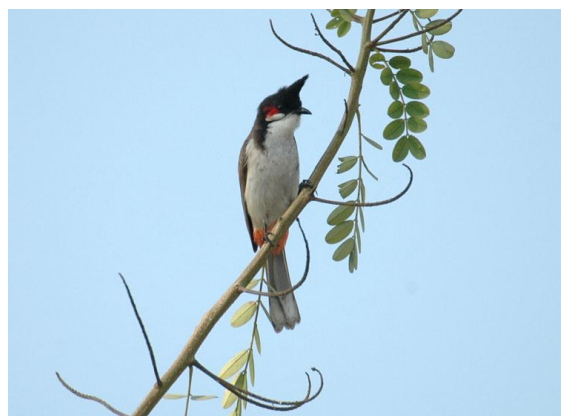
By now some more Asoka (*Polyalthia longifolia*, *P. pendula*) trees had been planted by the Forest Department and when these reached about 8 years of age they became thickly covered with drooping branches and leaves within which, the Indian cuckoo and the closely related Asian koel made their homes, the latter filling the neighborhood with its continual musical calls. Small bats also rested there during the day, hanging upside-down in the dense foliage of the Asokas. The park was also visited by the Pied-crested cuckoo during their migrations at the start of the monsoons each year. The sudden appearance of these birds in this season has earned them the name of the 'rain bird'. Eventually the park in front of my house became green and beautiful with trees,

bushes, shrubs and grass and people have stopped throwing their garbage in it. The Semal tree however, remained the centre of attraction for the birdlife. The best time was in February-March when the Semal flowered and all sorts of birds arrived to feed on the nectar of its flame-red blooms or for the myriad insects that were in turn attracted by the nectar. During this season I could spot birds like the brown capped woodpecker, the common flameback or the golden backed woodpecker, the grey hornbill, the golden oriole, green bee-eater, the black redstart and the spotted and black-headed munias. I once remember seeing even a paradise flycatcher, which must have stopped by on its migration route. A particularly aggressive bird was the white-breasted kingfisher, which is often found away from water and this went for the large beetles, grass hoppers and even lizards with its stout, red beak. Birds visited the semal tree not only when it flowered but also afterwards when its fruits appeared. The fruits exude droplets of a sticky juice that birds like the white eye, purple sun birds, ashy prinias and the tailor bird like to feed on. Nowadays, human habitations have come up in the areas around Mahanagar and continue to reach further and further

into the countryside, but when Mahanagar was close to the city limits even peacocks would sometimes stray into the park.

The list of birds which have lived or still live in our park or visit it does not end there and includes ground foraging birds like common hoopoe, red-wattled lapwings, the blue rock pigeon, white and white-browed wagtails, jungle babblers or 'the seven sisters' and the greater coucal or Mahok, which fed on earthworms and insects among the grass. Then there were predatory birds like Brahminy Kite, the Shikra that caught garden-lizards, cattle egrets which fed on insects, frogs and tadpoles and spotted and barred owlets that hid in the foliage of the *Polyalthia pendula* trees and caught mice at night. These would sometimes fearlessly land in my balcony to catch beetles and large monsoon insects that were attracted by a fluorescent bulb.

Every morning when I walked my son to the stop, where he was picked up by his school bus, I would point out the birds that I spotted to him. As he grew up, he too learned to identify 30 different birds many of which, he could recognize merely by



Red-whiskered Bulbul



Oriental Magpie Robin

their calls. If you have been counting, I have already enumerated 51 species that I have seen from my balcony and I must have missed a few. I don't think that if I list the birds again, I will be able to count so many species. I think this is because the weather has changed over the years; it has become hotter and drier and the rains rarely arrive in mid June like they used to. Such changes in the climate are bound to have affected the life cycle of insects

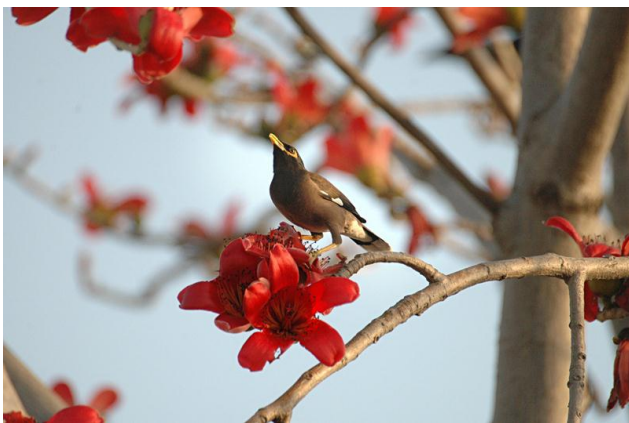
and this would in turn have affected the birds that feed on them. Lucknow, as I have said, has also spread `further and further and lost many of its old trees and vegetation. So if you wish to see all the birds that I have written about, you will have to go to where the city ends and the countryside begins but, if you keep your eyes open, you may still see quite a few of these in the parks near our homes.



Purple Sunbird



Brown Rock Chat



Common Mynah



Indian Tree Pie

Photo: Suresh Chaudhari (Ornithologist & Wildlife photographer)

# 4. Newspaper Clippings

## (i) International News



**April 15:**

1. Research figures out a way to discover the genetic basis of a disease by looking at organisms, finding disease equivalents by using computers algorithms to sift through vast sets of existing genomic data of worms, yeasts and plants. The algorithm pairs up sets of genes that overlap between these organisms and humans.
2. WCS released a set of critically endangered species



**April 23:** About 123 New species have been found in Borneo since 2007. Among the recent findings are a lungless frog and a new species of a flame colored snake.

**April 29:** The TKDL (Traditional Knowledge Digital Library) has revealed a 44% decline in patent applications

# (ii) National news



**May 28:** Current Science article by Ved Prakash Sharma and Neelima R. Kumar reports that electromagnetic frequency emitted by cell phones reduces bees colony size and number of eggs laid by the queen bee.

**June 5:** Pradipta Majumdar held on exhibition of photographs highlighting countries diversity in terms of it people fauna and nature

**June 7:** Meeting of the Western Ghats Ecology expert panel to identify ecologically sensitive zones in Kerala.



**June 17:** About 250 species of birds were spotted at Sultanpur National Park in the past. This year the lake has dried up some allege that lake is being dried out to get rid of *mangur* (Black African fish) that cat the smaller fish. This could be a blessing, as absence of Mangur could lead to more small fish for migrating birds to feed on.



### (iii) State news



#### April 16:

1. Shortage of funds forces the Kukrail Rehabilitation Centre to release eggs of Ghariyals into the wild. So far only young adults were released. Only 1300 individuals are estimated to be left in the wild out of which just 200 are breeding adults.

2. A new software could M-STriPES is launched to improve surveillance in Project Tiger reserve areas



**April 25:** Municipal solid waste project has come to threaten the village famous for Dussheri mangoes



**May 21: Ban on Peacock feather trade makes Sitapur villager smile:** The MoEF has proposed to amend section 43 (3) (a) and 44 of the wildlife protection Act, 1972 that related to transfer and sale of tail features of peacocks as demand for feathers outstrips supply leading to rampant poaching and of birds.

**Neha Shukla | 1756**

**O**n first look, Sitaram Rathod can be passed off as a nondescript villager who shines away from speaking about his work on peacocks. But juxtaposed with MoEF's proposed amendment in the Wildlife Protection Act (WPA), 1972, it's the killing of the national bird, his work appears significant.

The man holds a doctorate on peacocks and talks 'unbridled' on the threats faced by the national bird. "I have been talking about threats to peacocks since long," says Sitaram, hoping MoEF's move will help his cause, that of preventing poaching and killing of peacocks.

He has seen peacocks prancing around in his village ever since he remembers and that was the reason why he chose peacocks for study. "In my village, they are everywhere, we see them perched on thatched roofs, moving in flocks in fields and even roosting inside houses," he says.

Indeed, Hardasapur village in Maholi block of Sitapur district has hundreds of peacocks. Based on ocular sightings, their number can be pegged to about 400 birds in Hardasapur and neighbouring villages like Chamabagh and Badagaon. But the dwindling population of national bird is a growing concern for village folks. Peacocks are getting killed for flesh and feathers. "I have seen them (peacocks) here always in the past 40 years, only three

number seems to have reduced now," says an elderly villager. Poaching of peacocks is rampant in the area. "The birds are killed through poisoning or traps set up in fields," says Sitaram. The man realised the extent of threat to birds in village when he found the remains of his favourite peacock disposed of in a plastic sack close to his home about a year ago.

Hardasapur village in Maholi block of Sitapur district has hundreds of peacocks. Based on ocular sightings, their number can be pegged to about 400 birds in Hardasapur and neighbouring villages like Chamabagh and Badagaon. But the dwindling population is a growing concern...

back. From then on, he decided to dissuade villagers from killing them.

This efforts have sensitised villagers on the issue of peacock conservation, at least to an extent. Two of the village heads, Mahender and Ajay can easily guide one to spots where peacocks can be seen at different points of time during the day. A messenger Chamansyam says, "When come to know of a killer, we beat him up, but most of the times a killing goes undisturbed."



**SHOOT TO REMEDY:** Peacocks at Hardasapur village in Sitapur

Will MoEF's latest proposed amendment help the cause of peacocks in Maholi? Ministry of Environment and Forests (MoEF) is in the process of putting a ban on the trade of peacock feathers. The ministry stated on May 10 that it has been brought to its attention that demand for feathers outstrips supply leading to rampant poaching and killing of the birds.

To put an end to this, ministry has proposed to amend sections 43(a) and 44 of the Wildlife Protection Act (WPA), 1972, which relate to transfer and sale of tail feathers of peacocks.

Though villagers, including Sitaram, could not recollect any instance where a peacock poacher has been either severely punished or fined, they are still hopeful that proposed ban on trade of peacock feathers will help control poaching and killing. "Peacocks exist outside forests, in human areas and that makes them vulnerable," said V P Singh, state coordinator BIFN. Currently, the Act prohibits killing of peacocks as well as export of tail feathers or articles made from them. But it allows domestic trade in feathers or articles under assumption that they are naturally shed. Following the amendment, section 43(a) and section 44 will no longer exempt those possessing a certificate of ownership for peacocks from transferring or selling the tail feather and articles or trophies made from them. A comprehensive ban will be imposed on the sale, transfer and trade, said the ministry's release.

**TIMES CITY**  
THE TIMES OF INDIA, LUCKNOW | TUESDAY, JUNE 8, 2010

**Onion Carbide: Warmth of sweetness for mangoes**

**Sneha Mishra | 176**

LUCKNOW: It is for Odour and also for Onions. But there's more power packed in this red-hot personhood than meets the eye. If its medicinal benefits are not enough for the veggie to win your heart, here's a secret: Onions also the healthy and organic way to induce ripening of mangoes.

It's interestingly the method is not new. It is known to those in the business of growing and selling mangoes. Only it is an increasingly rare knowledge. I met a vegetable dealer in the market, especially healthy, fresh to eat. He said, "I ripen the fruit with the help of onions, we achieved success within three days. And though the quantity of onions turned out to be less than anticipated, the fruits ripened satisfactorily."

Using onions to induce ripening of mangoes takes an equal amount of time for a variety of reasons. Onions, which are organic and healthy. So, naturally, because aside from rip-

ening to be perfectly ripe on the outside, this tip, it will also be equally good on the inside (unlike its over ripe sisters one has had enough times in the past).

Calcium is a well known, it regularly used by mango growers. A Malhabad-based mango farmer on condition of anonymity said: "Traders and dealers start sending mangoes to Delhi at least 48 hours before the fruit begins to ripen naturally. They use calcium carbide in the boxes. They don't care about people's health, for them it is pure business."

Significantly, a recent research has proven the health hazards of consuming calcium carbide, even when it comes in contact with the fruit. **Researcher Kishor, another Malhabad-based orchard owner, said: "Some people eat mangoes without peeling off the skin. That is extremely dangerous. Even when the fruit comes in contact with a small quantity of carbide, it is poisonous because carbide is not safe from the poisonous effects."**

**Ripe Facts**

- Place a few onions on the sides and also in the centre, so that as mangoes eat it over contact with the vegetable.
- Cover the fruits with another sack of newspapers in such a way that it does not touch the skin.
- Check in less to three days, depending upon the extent to which they are ripe, the mangoes will start ripening.

**June 8:** Generally calcium carbide is used ripen mangoes this is a health hazard. It is now found that onions can be used to induce ripening in mangoes.

**TIMES REGION**  
THE TIMES OF INDIA  
SATURDAY, JUNE 19, 2010

**Team led by forest dept to count sarus crane population**

**For Ashish Dixit | 170**

**Kanpur:** The Sarus Crane census would be taken up in the state after a gap of 26 years on Friday. The forest department is planning to conduct the census across the state. The forest department is planning to conduct the census across the state.

The Sarus crane population in the state is estimated to be around 1000 birds. The forest department is planning to conduct the census across the state.

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**TIMES CITY**  
THE TIMES OF INDIA, LUCKNOW  
MONDAY, JUNE 21, 2010

**State bird's number dips 40%**  
Result Of First-Ever Crane Census in UP Shows Alarming Trends

**For Ashish Dixit | 170**

The Sarus Crane census in the state of Uttar Pradesh showed an alarming decline of 40% in the population of this bird, which is the state bird of Uttar Pradesh. The forest department has conducted the first-ever census of Sarus Cranes in the state.

The Sarus Crane population in the state is estimated to be around 1000 birds. The forest department is planning to conduct the census across the state.

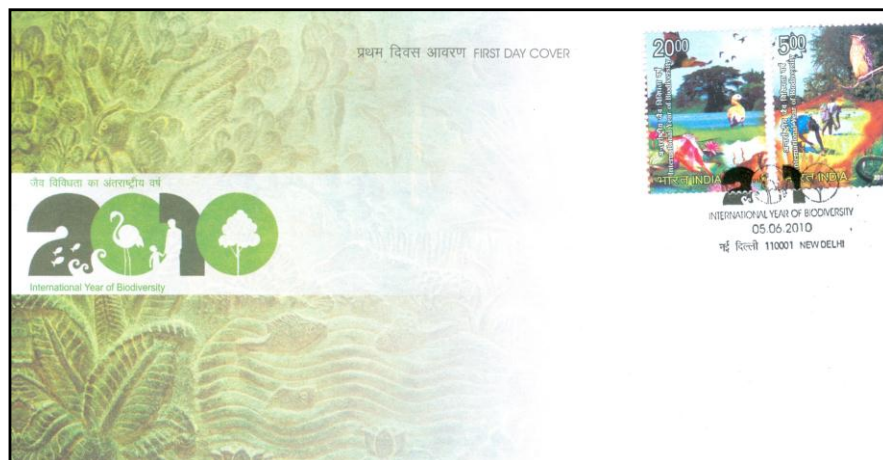
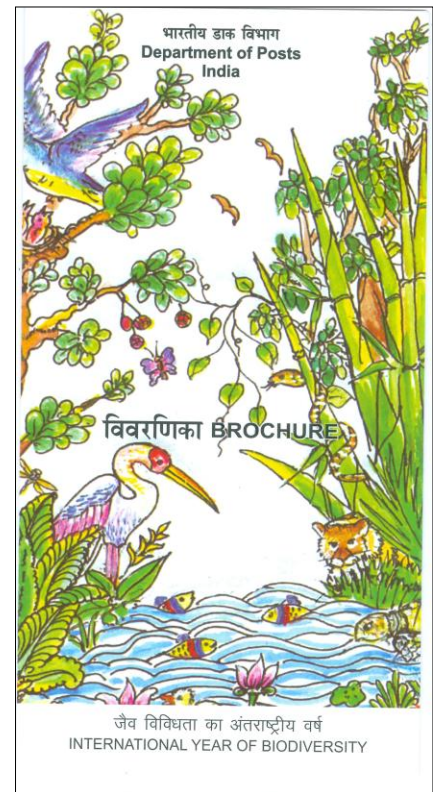
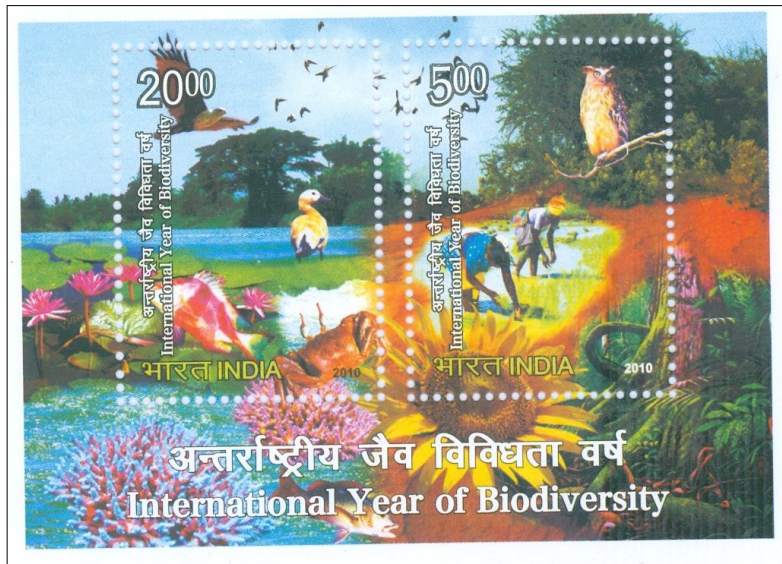
**June 19:** Exercise to ascertain the status of the state bird of Uttar Pradesh

**June 21:** In 1999-2000 the census of Sarus Cranes done by a private agency showed 3500 individuals the official figures are yet to come

## 5. Commemorative Stamps

On June 5th, 2010, World Environment Day i.e. India Post released two commemorative stamps on biodiversity by the former Indian President

Dr.A.P.J. Abdul Kalam at Vigyan Bhawan, New Delhi to enhance public awareness of the important of conserving biodiversity.



## 6. Estimated faunal diversity in India upto January 2009

Zoological Survey of India, Ministry of Environment and Forests has published a book titled. "**Animal Discoveries 2009**" (New Species and New Records) on World Environment Day (5th June 2010). This publication highlights the estimated faunal diversity in India (updated upto January 2009). In fact, within only about 2% of worlds total land surface, India is known to have

over 7.45% of the species of animals that the world holds and this percentage accounts nearly for **91,484 species** so far known, of which insects alone include 61,220 species. It is estimated that through further survey and inventorisation, about two times that number of species still remains to be discovered in India alone.

### Estimated Faunal Diversity in India (updated, January 2009)

(Source: Zoological Survey of India)

Taxonomic group		No. of Species		% in India
		World	India	
<b>PROTISTA (Protozoa)</b>		<b>31250</b>	<b>2577</b>	<b>8.24</b>
	ANIMALIA			
	Mesozoa	71	10	14.08
	Porifera	4562	500	10.70
	Cnidaria	9916	866	8.73
	Ctenophora	100	12	12.00
	Platyhelminthes	17500	1624	9.28
	Rotifera	2500	330	13.20
	Gastrotricha	3000	100	3.33
	Kinorhyncha	100	10	10.00
	Nematoda	30011	2866	9.55
	Acanthocephala	800	229	28.62
	Sipuncula	145	35	24.14
	Mollusca	66535	5072	7.62
	Echiura	127	43	33.86
	Annelida	12700	841	6.61

	Onychophora	100	1	1.00
<b>Arthropoda</b>		<b>998904</b>	<b>71323</b>	<b>7.14</b>
	Crustacea	35536	2936	8.26
	Insecta	867365	61220	7.05
	Arachnida	73440	5829	7.90
	Pycnogonida	600	17	2.83
	Chilopoda	3000	100	3.33
	Diplopoda	7500	162	2.16
	Symphyla	120	4	3.33
	Merostomata	4	2	50.00
	Phoronida	11	3	27.27
	Bryozoa (Ectoprocta)	4000	200	5.00
	Entoprocta	60	10	16.66
	Brachiopoda	300	3	1.00
	Chaetognatha	111	30	27.02
	Tardigrada	514	30	5.83
	Echinodermata	6223	765	12.29
	Hemichoradata	120	12	10.00
<b>Chordata</b>		<b>48463</b>	<b>5045</b>	<b>10.41</b>
	Protochordata	2106	119	5.65
	Pisces	21723	2548	11.72
	Amphibia	5162	289	5.60
	Reptilia	5817	460	7.91
	Aves	9026	1232	13.66
	Mammlia	4629	397	8.58
<b>Total (Animalia)</b>		<b>1195534</b>	<b>88907</b>	<b>7.43</b>
<b>Grand Total (Protista+Animalia)</b>		<b>1226784</b>	<b>91484</b>	<b>7.45</b>

## 7. Progress of Research projects / special studies

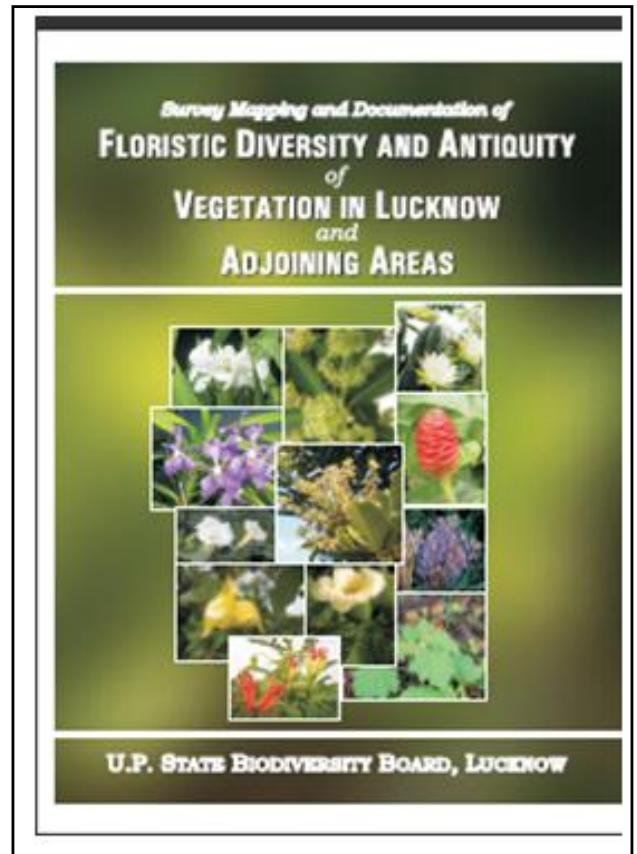
**Project:** Survey, Mapping and Documentation of Floristic Diversity and Antiquity of Vegetation in Lucknow and adjoining areas.

**Objectives:**

1. Survey of floristic Diversity to know present status of plant species
2. Mapping of vegetation
3. History of vegetation

**i. Floristic inventory and vegetation mapping**

The area has been intensively surveyed. Most of the part of district is occupied by residential colonies, government offices, parks and rest of the area is being under various developmental activities. Major part of the outskirts is under cultivation. Vegetationally, the area is very poor. The forest area is negligible in the district except some small areas of natural formation preserved in Kukrail Reserve forest, spread along both sides of Kukrail River in Moosabagh and Rehmankhara on Hardoi road, near Chandrika Devi and near Dilkusha garden. Thus the flora of Lucknow may be correctly said as agrarian characterized with introduced flora in considerable numbers and with a large number of truly cultivated species. Such a critical time of reducing natural vegetation cover in Lucknow district, the entire area has been intensively surveyed during 2009-



2010. In all 1299 species, 94 species are reported as new record for Lucknow flora (from Singh and Khanooja's, 2006 flora), 10 species as new record for Upper Gangetic Plain (Duthie's Flora 1960) and 3 species as new record for India (Hooker, 1872-92).

The families of the flowering plants are arranged according to Bentham and Hooker's system of classification in the floristic inventory of this report. Each family is provided with alphabetically arranged genera and all species are also arranged in same order within their respective genus giving correct name, important

synonyms, detailed description, field observation, uses and phenology. The floristic composition of every habitat in each area of district has been provided under mapping of vegetation.

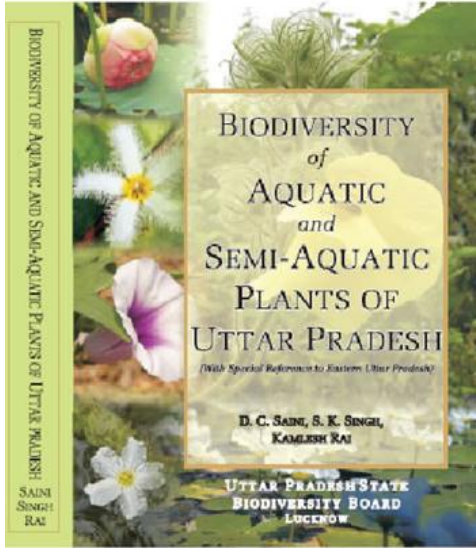
## ii. Antiquity of vegetation in Lucknow and adjoining areas

The area of proposed investigation is also abounding with a number of extant and extinct lakes of various dimensions. These served as archives to infer the vegetation antiquity, inception, agricultural practice and its subsequent pace during the past few millennia, using pollen proxy records. Thus, to study the chronological sequence of the development of vegetation, **Kathauta Tal** was selected. After critical study of pollen recovered from the sediment it has been found that, the entire vegetation composition depicts the presence of mixed scrub forest, which is more or less comparable to the present day vegetation of the region. The consistent representation of taxa like Chenopodiaceae, *Alternanthera* and Asteraceae in good frequencies throughout denotes the extensive crop cultivation in the region as they are the prominent indicators of

anthropogenic activities. The other herbage, viz., Lamiaceae, Brassicaceae, Caryophyllaceae, *Cannabis*, *Xanthium*, *Justicia* and Polygonaceae were sporadic. The arboreal were feeble in values. Thus, the entire vegetation composition depicts the presence of mixed scrub forest that is more or less comparable to the present day vegetation of the region. The consistent representation of all these taxa in good frequencies throughout denotes the extensive crop cultivation in the region, as they are the prominent indicators of anthropogenic activities. The swampy condition, prevailing along the margin of lake was profusely inhabited by sedges followed by *Polygonum plebeium*, whereas *Eriocaulon* and Apiaceae were feebly represented.

The aquatic vegetation was quite luxuriant as evidenced by good representation of *Nymphoides*, *Lemna*, *Potamogeton* and *Nymphaea*, more particularly in the lower half of the profile. *Eichhornia*, the chief aquatic element of the lake water, and *Myriophyllum* were extremely sporadic. Thus the higher values of aquatic plants in the beginning of the sequence suggest that the lake had a wider spread as compared to the present day status of the lake.

## 8. Recent Publication of U.P. State Biodiversity Board



### "Biodiversity of Aquatic and Semi-Aquatic Plants of Uttar Pradesh"

by D.C. Saini, S.K. Singh and Kamlesh Rai

An important book for those interested in the growing literature on wetland biodiversity

About 751 Species are described in this book along with 547 coloured photographs. Hard Bound. 479 Pages. Cost Rs 1500

Orders for the book may be placed by sending a Bank Draft / DD in favour of: "Secretary , UP State Biodiversity Board, Lucknow"



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### **Published By:**

**Uttar Pradesh State Biodiversity Board**, East Wing III<sup>rd</sup> Floor 'A' Block, Picup Bhawan, Gomti Nagar, Lucknow  
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