UP State Biodiversity Board

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BIODIV News





Sandi Lake, District Hardoi

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Editorial

Esteemed Readers,

The UN General Assembly has declared 2011-2020 as the United Nations Decade on biodiversity. This decade is a vehicle to support the 2011-2020 Strategic Plan for Biodiversity and Aichi Biodiversity Targets. It is also a worldwide celebration of everything we stand to lose by doing nothing and everything we stand to gain by changing our ways. The year 2011 is also the International Year of Forests. Forests contain some of the planet's most vibrant ecosystems and are essential to the survival and well being of all 7 billion of us!! Forests are disappearing partly because they are undervalued and our economy fails to recognize ecosystem services provided by intact forests and standing trees.

Speaking of trees, this issue includes write-ups on the *Panchpallav*, *Akshay vat* in Sitapur District and *Parijat* tree in Barabanki district. In subsequent issues this year we will try to cover such trees of cultural significance found in the state of Uttar Pradesh.

In addition, the year 2011, is also the also commemorates the 40th anniversary of the Ramsar Convention. This issue includes the activities organized by the Board on the International Wetland Day celebrated on 2 Feb, 2011. The World Sparrow day (WSD) was celebrated on 20th March, 2011 to raise public awareness about the problems faced by this species in its daily fight for survival.

International news includes the findings of the Dr A.D. Barnosky et al. at the UC Berkley about the sixth mass extinction that is already underway and is different from the others due to its anthropogenic cause. National headlines are about cancellation of Bt maize trails in Bihar even as the moratorium on commercialization of Bt Brinjal stands. Also in the National headlines was the Tiger census report showing the National numbers to be about 1706, about 295 higher than the last count of 1411 in 2005. The State of Uttar Pradesh has shown a marginal increase in their numbers .But the report also states that the total Tiger area has shrunk from nine million hectares to seven million hectares. The existing 39 tiger reserves represent around one third of our high-density forest area. Counting endangered species is tedious and at times dangerous. One thing is certain however without reliable, transparent and credible numbers, we have no idea if we are saving nature!

- Editors

1-International Year of Forests -2011



orests cover about 31 per cent of the land on Earth, around 4 billion hectares, and contain more than two-thirds of the world's terrestrial species. The Amazon basin alone is home to an estimated 25 per cent of all land-based species.

- 53 per cent of the world's forests are found in just five countries: Brazil, China, Canada, the Russian Federation, and the United States of America.
- More than 1.6 billion people depend on forests for their livelihoods; forests are home to an estimated 300 million people around the world.
- 80 per cent of people in developing countries rely on traditional medicines, up to half of which originate from plants found mainly in tropical forests.
- Forest biodiversity is the basis for more than 5,000 commercial products, from aromatic oil distilled from leaves to herbal medicines, food and clothing.
- Three quarters of the world's accessible fresh water comes from forested watersheds; forests purify drinking water for two-thirds of the major cities in developing countries.
- Forest biodiversity is being lost at an alarming rate: up to 100 animal and plant species are lost every day in tropical forests.
- 36 per cent of the total forest area is covered by primary forests-i.e. forests comprised of native species where the ecological processes have not been significantly disturbed by human activity. Primary forests have decreased by more than 40 million hectares since 2000, mostly due to logging and agricultural expansion.
- The rate of deforestation has slowed somewhat over the past decade; yet each year, approximately 13 million hectares of the world's forests, an area the size of Greece or Nicaragua, are lost or degraded. Deforestation and forest degradation in primary tropical forests, which are of high biodiversity value, continue at an alarming rate: around 6 million hectares per year.
- Emissions resulting from deforestation and forest degradation may contribute more than 15 per cent to annual global greenhouse gas emissions.
- It is estimated that up to one billion hectares, or about one quarter of all forest lands, are in need of restoration to improve their productivity and delivery of ecosystem services; restoring these forest landscapes would have enormous benefits for sustainable development.
- Globally, more than 460 million hectares of forests, 12 per cent of the total forest area, are designated for the conservation of biodiversity as their primary function, an increase of 32 per cent since 1990.

Over the next ten years, from 2011-2020, countries all over the world are taking action to help save the variety of life on Earth so that we can live more in harmony with nature. Our wellbeing is dependent on the health of our ecosystems. This decade is critical, as it is the timeframe for implementing the Strategic Plan for Biodiversity agreed in Nagoya Japan in October 2010.



2-Panchpallav

"Panchpallav" usually refers to an aggregate of five sprigs or shoots. Trees of the Panchpallav are a habitat to numerous species of life. Usually people plant all the five trees in the same pit. As a result, the fast growing ones overtake the others and the weak ones eventually die out. Hence, it is advisable to plant all the five separately. "Pallav" actually means leaves, so the leaves of these five trees make the Panchpallav. A few types of Panchpallav species are listed below as per their cultural significance:

- For Vedic prayers: Commonly, the five species include Aam(Mango- Mangifera indica), Bargad (Ficus benghalensis), Peepal (Ficus religiosa), Pakad (Ficus lacor) and Gular (Ficus glomerata). In vedic puja, these five leaves are used to establish the "kalash" for prayers.
- For Tantric prayers: The Narad Puran lists Kathal (Jack fruit- Artocarpus heterophyllus), Aam (Mango-Mangifera indica), Bard/ Bargad (Ficus benghalensis), Peepal (Ficus religiosa) and Bakul (Maulshri-Mimusops elengi).
- For Gandha Karma (Fragrance /medicinal **preparation)**: Aam (*Mangifera indica*), Jamun (Syzigium cumunii), Kaith (Feronia limonia), Bijora neembu (Citrus medica) and Bel (Aegle marmelos) are referred to as Panch pallav.
- For relief from disorders in the mouth: A gargle with the decoction (kadha) of the leaves of parval (Trichosanthus dioca), Neem (Azadirachta indica), Jamun (Syzigium cumini), Aaam (Mangifera indica), (Jasminium grandiflorum) Chameli recommended.

We found a Panch-pallav tree in Sitapur district about 100 meters from the Vyas Gaddi shrine at Nemisharanya with Peepal (Ficus religiosa), Aam (Mangifera indica), Neem (Azadi-rachta indica), Bargad (Ficus benghalensis) Jamun (Syzigium cumunii). The pictures of this tree(s?) are as presented in this article.









3-Akshay Vat at Vyas Gaddi, Nemisharanya, Sitapur District



1. Main trunk of the Banyan tree 2 & 3 Woody aerial roots, 4. Main trunk of the tree

The *Vyas gaddi* is a popular tourist religious spot located at Naimisharyanya in Sitapur district of Uttar Pradesh. It is said that it was here that Sage Ved Vyasa divided the Vedas and created the Puranas. A big banyan tree is located here, believed to be very old. Botanically known as Ficus benghalensis, and belonging to the family Moraceae, the tree is a native of India. The fruit is like a small fig but is not edible and is red when ripe. Fruit-eating birds disperse the seeds of Banyans. The seeds germinate and send down roots towards the ground, and may envelop part of the host tree or building structure with their roots. The leaves of Banyan tree are large, leathery, glossy green and elliptical in shape. In Hinduism, the Banyan tree is considered sacred and is called "vat vriksha" and is also known as Bargad, Vatavriksh, and Barh.

The area around the main stem is found to be cemented as seen in the picture. The tree has spread out laterally to cover a wide area. A number of aerial prop roots that have now become woody trunks grow around the main tree (over 10). Some construction work was seen around the woody aerial roots that had reached the ground and established themselves. Though there is religious sentiment to cutting any part of this tree, we did observe some light pruning work going on.

4-Parijat tree in Barabanki District



A view of the Parijat (Adansonia igitata) tree at Barabanki

This "Parijat" tree is located in village Birolia (Kinthur) of Barabanki district on the Kotwadham road. The village is named Kinthur after Kunti of Mahabharat. The scientific name of this tree is Adansonia digitata. Also called Gorakh imli or vilayati imli (fruits taste like tamarind). The tree is very wide at the bottom as seen in the pictures. On March 16, 2011 the staff of UPSBB visited this site. The CBH (Circumferance at Breast Height) of the tree was taken and found to be about 12 meters or 39.5 ft.

The tree *Adansonia digitata* belongs to the family Malvaceae. Of African origin this tree is also called



Flowers of Adansonia

Baobab, Dead rat tree, Monkey bread tree, Upside down tree. It is called the "Dead Rat Tree" because its furry fruits resemble rats strung up by their tails. Some people also refer to this tree as "Kalpa vriksha". The baobab tree is sometimes known as the "upside-down tree" due to its massive, cylindrical trunk, short branches and deep, far-ranging root system that makes it appear to have been planted upside-down. It is a tree of dry regions. The baobab is leafless for seven to eight months of the year. It can grow up to 25 meters

tall and can live for several thousand years. The smooth trunk of the baobab can reach a diameter of 60 feet. Its branches grow up to 75 feet tall and are pinkish gray or copper in color. Leaves grow to 5 inches long with three to seven leaflets. The tree bears sweet-scented 5- to 7-inch drooping flowers on long stems; the pulpy fruit is 6 to 10 inches long and 4 inches wide.

Significance of this tree in Africa: The baobab tree is the traditional meeting place for African community members to exchange information, share news and discuss problems. The tree's widespreading branches offer shelter from the sun and rain, and encourage conversation and interaction. The tree's longevity makes it a familiar landmark in community life. The African baobab also has significance as a religious symbol. As one of the longest-lived trees -- some carbon-dated back 2,000 years, according to Ohio State University -- it is associated with the divine and eternal. Almost every part of the tree is used, elevating its importance as a gift from God for the survival of the community. The large, hollowed-out trunks are used as burial chambers, and the tree is often used as a backdrop in African stories that convey moral principles.

Significance of this tree in Hindu mythology: It is said that Arjun brought this tree from heavens and Kunti used to offer and crown Shivji with its flowers. The other saying being, that Lord Krishna brought this tree for his beloved queen Satyabhama. Historically, though these saying may have some bearing or not, but it is true that this tree is from a very ancient background. The tree is Dioecious that is; male and female flowers are found on separate trees. Seed will be produced only when both male and female trees are in vicinity of one another. The Lucknow zoo also has this tree near the serpentarium.





A view of the tree at Birotha village

Trying to get tape around the tree.



Measuring the circumference in feet.



Measuring the circumference in meters.

Reference: 1. African Baobab Tree Information at < http://www.ehow.com/info 8404196 african-baobab-tree-information.html>

5- Fifth Board meeting, 10 March 2011



Key Issues:

- The Board approved the detailed guidelines for eligibility, project appraisal, implementation, evaluation, monitoring and release of grants for projects to be submitted to the Board.
- The Board approved the following projects:
 - Germplasm exploration, assessment and documentation of Fish Biodiversity of Uttar Pradesh. The implementing agency for this project is National Bureau of Fish Genetic Resources, Lucknow.
 - Exploration and documentation of cucurbits biodiversity and its implication in Uttar 2. **Pradesh**. The implementing agency for this project is **Narendra Dev University of Agriculture** and Technology, Kumargani, Faizabad
 - Inventorization, Impact Assessment and risk communication of Invasive fish species in Uttar Pradesh. The implementing agency for this project is National Bureau of Fish Genetic Resources. Lucknow.
 - **Enumeration of lichens of Uttar Pradesh**. The implementing agency for this project is National Botanical Research Institute, Lucknow
 - Monitoring of roosting and breeding sites of vultures in Jhansi, Lalitpur, Jalaun and **Mahoba district of U.P.** The implementing agency for this project is **University of Lucknow**, Lucknow
 - Status Survey of Bengal Florican in the grasslands of Uttar Pradesh. The implementing agency for this project is **Wild life Institute of India**, Dehradun.
 - Assessment and Prepartion of an Illustrated Resource Inventory of underutilized Wild Edible Plant Resources in terai region of Uttar Pradesh. The implementing agency for this project is National Botanical Research Institute, Lucknow
 - Annotated and Coloured Checklist of the Amphibians and Reptiles of Uttar Pradesh. The implementing agency for this project is **University of Lucknow**, Lucknow.





- Documentation of Plant Diversity through Literature Survey for Development of Uttar **Pradesh Biodiversity Database Information System (UPBDIS)**. The implementing agency for this project is Birbal Sahni Institute of Paleobotany, University Road, Lucknow
- 10. **Compendium of microbial biodiversity**. The implementing agency for this project is **National** Bureau of Agriculturally Important Microrganisms, ICAR, Maunath Bhanjan, U.P.
- 11. Use of ITK (Indigenous Technology Knowledge) and experiences in crop production and protection in Vindhayn region of Eastern Uttar Pradesh. The implementing agency for this project is **Banaras Hindu University**, Varanasi

Power point presentations were made by the Principal Investigators of all projects to the Board.

Red-crowned Roofed Turtle

Batagur kachuga (Gray 1831); Family Geoemydidae, Asia: Bangladesh, India (Bihar, Madhya Pradesh, Punjab, Uttar Pradesh, West Bengal), Nepal, IUCN, Red List: CR, Critically Endangered A1cd, CITES: Appendix II, as Batagur spp.



The last known stronghold for this large river turtle (up to 60 cm carapace length) is on the Chambal River in central India. No more than approximately 500 adult females remain of a species that once had a very large range.

6-Biodiversity Management Committees (BMC's)

In accordance with Uttar Pradesh Biological Diversity Rules, 2010, Rule 21, Biodiversity management Committees have been constituted in Saidapur Devkali (District Lakhimpur kheri), Nanpara Dehat (Dist Baharaich), Baihar, District Chitrakoot, Bhitauli Kalan, District Barabanki. The details of the BMC's formed this year are as follows:

Nanpara Dehat , District Baharaich

The Biodiversity Management Committee of Nanpara Dehat, District Baharaich was constituted on 07.12.2010 in a meeting organized in the village as per guidelines of the Biological diversity Act, 2002 and UP state Biological Diversity Rules, 2010. The constitution of the committee was as follows:





Village meeting Nanpara dehat

1	Chairperson	Om Prakash Sharma	Kangdan Hata, Nanpara Dehat, Vikas Khand, Balha, Bahraich
2	Member	Shiv Prakash Porwal	Shivpur Road, Nanpara Dehat
3	Member	Shyam Lal Patel	Hakim Purwa, Nanpara Dehat
4	Member	Chet Ram Pandey	Bhajja Purwa, Nanpara Dehat
5	Member SC/ST	Vinay Bharti,	Bhajja Purwa, Nanpara Dehat
6	Member Women Rep.	Km. Arti Arya	Kangdan Hata, Nanpara Dehat
7	Member Women Rep.	Km. Sanyogita Sharma	Kangdan Hata, Nanpara Dehat

Baihar, District Chitrakoot

The Biodiversity Management Committee of Baehar, District Chitrakoot was constituted on 19.01.2010 in a meeting organized in the village as per guidelines of the Biological diversity Act, 2002 and UP state Biological Diversity Rules, 2010. The constitution of the committee was as follows:

1	Chairperson	Ram Lakhan	Baihar, Block- Karvi, Chitrakoot
2	Member	Sri Sushil Kumar	Baihar, Block- Karvi, Chitrakoot
3	Member SC/ST	Sri Mohan Lal	Baihar, Block- Karvi, Chitrakoot
4	Member SC/ST	Sri Badri	Baihar, Block- Karvi, Chitrakoot
5	Member	Sri Gore Lal	Baihar, Block- Karvi, Chitrakoot
6	Member Women Rep.	Smt. Saroj,	Baihar, Block- Karvi, Chitrakoot
7	Member Women Rep.	Smt Rakhi,	Baihar, Block- Karvi, Chitrakoot

Bhitauli Kalan, District Barabanki

The Biodiversity Management Committee of Bhitauli kalan, District Chitrakoot was constituted on 03.03.2011 in a meeting organized in the village as per guidelines of the Biological diversity Act, 2002 and UP state Biological Diversity Rules, 2010. The constitution of the committee was as follows:

1	Chairperson	Smt. Pushpa Yadav	Bhitauli Kalan, Block- Banki, Distt. Barabanki
2	Member SC/ST	Sri Barsati	Dallu Khera, Majra- Bhitauli Kalan, Block- Banki, Distt. Barabanki
3	Member SC/ST	Sri Santosh	Dallu Khera, Majra- Bhitauli Kalan, Block- Banki, Distt. Barabanki
4	Member	Sri Ram Sajeevan	Bhitauli Kalan, Block- Banki, Distt. Barabanki
5	Member	Sri Sandeep	Jarwa, Majra- Bhitauli Kalan, Block- Banki, Distt. Barabanki
6	Member Women Rep.	Smt Sunita	Bhojpur, Majra- Bhitauli Kalan, Block- Banki, Distt. Barabanki
7	Member Women Rep.	Smt Kiran Devi	Jarwa, Majra- Bhitauli Kalan, Block- Banki, Distt. Barabanki

Trees

Trees just stand around all day and sun themselves and rest. They never walk or run away and surely that is best. For otherwise how would a squirrel or robin find its nest?

- - - - Aileen Fisher

7- Wetlands (Conservation and **Management) Rules 2010:**



- It calls for the constitution of a **Central Wetland Regulatory Authority**, chaired by the Secretary, MoEF &, as expected, members from various Govt ministries like Agriculture, Water Resources, Tourism, Social Justice, Central Pollution Control Board as well as four experts from the fields of hydrology, limnology, ornithology & ecology. Some of these expert names nominated by the government without any transparent process do not inspire confidence. The authority has 3 year tenure.
- It seeks to regulate wetlands which include **Ramsar Wetlands**, and what it calls 'Protected Wetlands' which include ecologically sensitive wetlands, wetlands in protected areas. UNESCO sites or wetlands near UNESCO sites, wetlands above the elevation of 2500 meters with area above 5 ha or. wetlands or wetland complexes below the elevation of 2500 meters, but with an area more than 500 hectares or any other wetlands suggested by the Central Wetland Regulatory Authority.
- **Restrictions** on activities within the wetlands include reclamation, setting up industries in vicinity, solid waste dumping, manufacture or storage of hazardous substances, discharge of untreated effluents, any permanent construction, etc.
- **Regulated Activities** (which will not be permitted without the consent of the state government) include hydraulic alterations, unsustainable grazing, harvesting of resources, releasing treated effluents, aquaculture, agriculture, dreading, etc.
- The major functions of the authority include identification of new wetlands for conservation, ensuring that the Rules are followed by the local bodies, issue clearances, etc.
- The State Governments are to submit a 'Brief Document' about the wetlands in their state which qualify for protection under the Rules. The Authority will then assess the wetland and if accepted, the Central Government shall notify it as a 'Protected Wetland'.
- Any appeals against the decision of the Authority can be made to the National Green Tribunal.

The Rules have a wide ranging definition of what is a wetland, "wetland means an area of marsh, fen, peatland or water; natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters and includes all inland waters such as lakes, reservoir, tanks, backwaters, lagoon, creeks, estuaries and man made wetland and the zone of direct influence on wetland that is to say the drainage area or catchment region of the wetlands as determined by the authority but does not include main river channels, paddy fields and coastal wetlands".

8- Wetland Day Celebrations

2nd February 2011

The theme for this year's Wetland Day was "Forests for water and wetlands". On World Wetland Day, an essay competition was organized for students of class V to XII. The topic was "Importance of Wetland Conservation". For the graduates, the topic of essay was "Forests for Water and Wetlands-Importance, Current uses and Challenges in Wetland Conservation".

A poster competition was also organized for the senior section with the topic "Forests for Water and Wetlands". In addition to this, a field trip was organized for students of Study Hall School on 27th Jan, 2011 in which 119 students of class IV took part. On 28th Jan, 2011, another topic was organized for students of class V of the same school. The Turtle Survival Alliance provided coloring books to the students on this occasion.

Students of Study Hall School, Gomti Nagar at Nawabganj coloring turtles on the occasion of World Wetlands Day 2011, Feb 2









"If there is magic on this planet, it is contained in water"

-Loran Eisely, The Immense Journey, 1957





Courtesy (coloring book): Turtle Survival Alliance

List of Prize Winners World Wetland Day (February 02, 2011)

Essay Competition Category- V to VIII

Topic: Importance of wetland conservation in Uttar Pradesh

S. No.	Prize	Name of the Student	Name of the School	Class
1	Ist Prize	Pratibha Shakya	RLB Memorial Sr. Sec. School, Lucknow	VIII-A
2	IInd Prize	Rajat Mani Tripathi	C M S, Gomti Nagar, Lucknow	VIII-B
3	IIIrd Prize	Maithey Bishnoi	C M S, Gomti Nagar, Lucknow	VIII-B
4	Consolation	Prerna Sharma	RLB Memorial Sr. Sec. School, Lucknow	VII-C
5	Consolation	Ujjwal Goel	C M S, Gomti Nagar, Lucknow	VIII, Sec-B
	Tc		enior Group (IX to XII) tland conservation in Uttar Pradesh	
1	Ist Prize	Shweta	RLB Memorial Sr. Sec. School, Lucknow	IX-A
2	IInd Prize	Preeti Prajapati	RLB Memorial Sr. Sec. School, Lucknow	IX- H/M
3	IIIrd Prize	Nitesh Kashyap	Study Hall, Vinay Khand-2, Gomti Nagar, Lucknow	XI Science
4	IIIrd Prize	Anukriti Gupta	Scholar's Home, Vipul Khand, Gomti Nagar, Lucknow	XI- Com.
5	Consolation	Shivam Khare	Study Hall, Vinay Khand-2, Gomti Nagar, Lucknow	XI Science
6	Consolation	Priya Gupta	RLB Memorial Sr. Sec. School, Lucknow	IX-A

"Ramsar is the oldest global environmental treaty and it is specially focused on one ecosystem - wetlands. "

Category- Graduate Group

Topic: Forests for water and wetlands- Importance, Current uses and challenges in wetland Conservation

SI. No.	Prize	Name of the Student	Class	Name of the College/University
1	Ist Prize	Rhythm Singh	M.B.AIInd Semester	Lucknow University, Lucknow
2	IInd Prize	Faizia Tabassum	-	Department of Zoology, Shia P.G. College, Lucknow
3	IIIrd Prize	Shama Parveen	B.A. Ist year	Pandit Deen Dayal Upadhyaya Girls Degree College, Lucknow
4	IIIrd Prize	Tapti Nigam	-	Department of Zoology, Shia P.G. College, Lucknow
5	Consolation	Shalini Dixit	B.Com lst year	Pandit Deen Dayal Upadhyaya Girls Degree College, Lucknow

List of Prize Winners - Poster competition Category- IX to XII

Topic: Forests for Water and Wetlands

SI. No.	Prize	Name of the Student	Name of the School	Class
1	Ist Prize	Chitra Vishwakarma	RLB Memorial Sr. Sec. School, Lucknow	X-D (E/M)
2	IInd Prize	Aakriti Pal	RLB Memorial Sr. Sec. School, Lucknow	X-B (E/M)
3	IIIrd Prize	Chanda Singh	RLB Memorial Sr. Sec. School, Lucknow	IX-A (E/M)
4	Consolation	Kritika Modi	RLB Memorial Sr. Sec. School, Lucknow	IX-A
5	Consolation	Rishu Rai	H.A.L. School, Faizabad Road, Lucknow	IX-D
6	Consolation	Sarita Nishad	T.D. Girls Inter College, Gomti Nagar, Lucknow	XI-B

"In every glass of water we drink, some of the water has already passed through fishes, trees, bacteria, worms in the soil and many other organisms, including people.....living systems cleanse water and make it fit, among other things, for human consumption."

-Elliot A. Norse, in R.J. Hoage ed., Animal Extinctions, 1985.



Ist Prize, Chitra Vishwakarma, Rani Laxmi Bai Memorial School, Lucknow



IInd Prize, Aakriti Pal, Rani Laxmi Bai Memorial School, Lucknow



IIIrd Prize, Chanda Singh, Rani Laxmi Bai Memorial School, Lucknow



Consolation, Kritika Modi, Rani Laxmi Bai Memorial School,



Consolation, Rishu Rai, H.A.L. School, Faizabad Road, Lucknow



Consolation, Sarita Nishad, T.D. Girls Inter College, Gomti Nagar, Lucknow

Category- Senior

Topic: Forests for Water and Wetlands

SI. No	o. Prize	Name of the Student	Name of the School	Class		
1	Ist Prize	Anandita Singh	Lucknow University, Lucknow	MBA HR & IR IInd Semester		
2	IInd Prize	Ruchi Saxena	Lucknow University, Lucknow	MBA (MS)- IInd Semester		
3	IIIrd Prize	Akansha Mishra	Shia P.G. College, Lucknow	M.Sc. Sem IV		



Ist Prize, Anandita Singh, Lucknow University, Lucknow



IInd Prize, Ruchi Saxena, Lucknow University, Lucknow



IIIrd Prize, Akansha Shia P.G. College, Lucknow

Did you know...

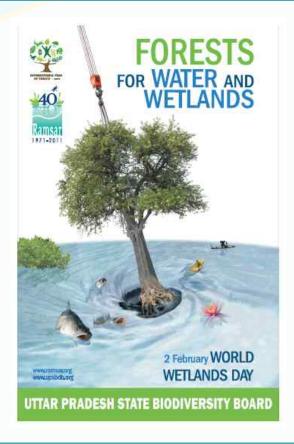
- Forests are home to 300 million people around the world?
- Forests cover 31% of total land area?
- The livelihoods of over 1.6 billion people depend on forests?
- Primary forests account for 36% of forest area?
- For every one-degree temperature rise, 10% of species are predicted to become extinct globally.

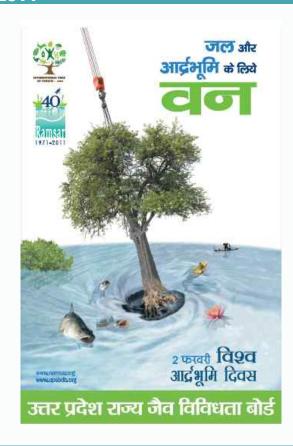
"Wetlands have a poor image......yet they among the Earth's greatest assets.....mankind's water wealth."

-Edward Maltby, Water logged Wealth, 1986

POSTERS FOR WETLAND DAY

FEBRUARY 2011





POSTERS FOR STATE SYMBOL

FEBRUARY 2011





The Ramsar Convention

"40 years of caring for Wetlands" 160 contracting parties, 1904 wetlands of International importance.

9-World Sparrow Day- 20 March 2011-

Celebrating the common biodiversity around us.



The diminutive **house sparrow** (*Passer* domesticus) is perhaps one of the earliest birds you can remember from your childhood. It is a species of passerine bird of the sparrow family Passeridae. It has feathers mostly in different shades of brown and grey. They love to feed on food grains and worms. It is popularly known as *goriya* in Hindi and *Chriya* in Urdu. Unfortunately, the house sparrow is now a disappearing species. But like all other plants and animals which were once abundant and are now facing an uncertain future, their numbers are also declining across their natural range.

The World Sparrow Day (WSD) was celebrated on 20th March across the globe to raise public awareness about the decline of the house sparrow and throw light on the problems faced by the species in its daily fight for survival. The rationale for celebrating World Sparrow Day was not only to commemorate the event for a day but to use it as a platform to underscore the need to conserve sparrows as well as the urban biodiversity. A request was given out in newspapers of the state to the public requesting them to get out of their homes, on 20th March, 2011, between 7am and 7.30am in the morning and count the number of sparrows that one could see near their homes and send it to the Board at upstatebiodiversityboard@ gmail.com. Despite it being Holi, the festival of colours, the support to us in our efforts to spread awareness about urban biodiversity was encouraging.



Don't let the chidiya fly away forever

PIONEER NEWS SERVICE IN NEW DELHI

If you live in an apartment block, after you have read this story walk into your balcony or look out of the nearest window and try to spot a sparrow. It is more than likely that you shall fail to spot one. The once ubiquitous common

house sparrow, given to much raucous chirping and nesting in the

become near extinct in cities and towns. Deprived of food, shelter and security, the sparrow population has dwindled

security, the call alarmingly.

Old-fashioned houses have given way to high-rise buildings which have robbed sparrows of their thread meeting spaces. Open green areas have small displayed the call displayed the call disp traditional nesting spaces. Open green areas have disappeared, robbing sparrows of their natural diet of seeds and insects. Rampant use of pesticides has ensured gardens and lawns are insect-free. Microwave radiation from cell towers that

dot urban, semi-urban and rural areas, is believed to have rendered sparrows infertile, vastly reducing their ability to breed. Strange as it may sound, the switchover to unleaded petrol has resulted in the release of chemicals in the air that kill insect species which sparrows feed their broods.

Ironically, sparrows prefer to live close to human habitations. But the preferred lifestyle of our times denies them the very right to live. While the disappearance of the house spar-row has gone unnoticed in India's cities, where

there is least concern for either environment or ecology, it has caused sufficient concern in the West. Britain's Royal Society for the Protection of Birds has included the house sparrow in the 'Red List' of endangered avian species. March 20 has been designated

World Sparrow Day to make people aware of the imminent extinction nooks and crannies of **WORLDSPARROWDAY** of sparrows and urge them to our homes, has now

huge loss to both mankind and

The good news is that official and voluntary organisations are now sufficiently concerned to get into the act of saving the sparrow. To raise awareness, the Postal Department has released a commemorative stamp on the small grey-

In Bangalore, where sparrow sighting is a rarity, 10,000 free nesting boxes will be distributed, with more to follow. The Bohras have for-mally adopted a 'Save the Sparrow' campaign to be led by community elders. Nature Forever, a Nashik-based NGO, has gone online (www.natureforever.org) and offers inexpensive feeders and nesting boxes that serve to bring nature to your city home.

Meanwhile, everybody can come to the aid of the house sparrow by putting out feed (bajra) and water on a window sill. And a nesting box in the balcony. With a little bit of help from city dwellers, the chidiya can escape the list of extinct



शहर में बसेरा तलाशती गौरैय



लखनक। गांव से शहरों जो ओर प्रसायन केमल इंसानों को प्रवृत्ति नहीं हैं स्वीक अब गांव को गीरिया भी शहरों को स्वत्त कर रही हैं जाने माने में दनका कर रही हैं। उन्हों सामें में दनका करेरा डिल गांक डें और भीवन कारोतना हो गांव की हमारें में ने जीव मानारों में दाने उत्ताराने पढ़ रहे हैं। यन्ततीयों के प्रति संस्टित्हां तहा के स्वताने आज गीरिया स्वित्ता के कारा प्रत्य क्षांत्र कुछ हैं। हम तो यो गांव में बच्चान का रहा है स हो सहरों में रहें सा रहे आंक्र माना रहा है।

विश्व गौरैया दिवस आज

प्रतिस्त को विश्व के बात जाता है। व स्तियाकों का प्रतिस्त परिवार के सिर्माण में सिरामण में सिरामण

ऐसे बचा सकते हैं अपनी गौरैया को

प्त के लॉन पर गहुनुमा आकृतियां बनवाएं निससे गीरिया को रहने की बागह मिले बिदेशी पेड़ पीजों की बबाव देशी वृक्ष समाए बिसमें छांब हो और वे बैठ सकें। नाशियां में अन्त बहाने के बबाए पर के छत पर या फिर ऑगन में हानें डॉलें बिससे गरिया को पोयन मिले। छत पर बटीरे में मानी पर का रखें विससे उनकी प्यास बुहे।

जैविक खेती अपनाकर इस ग्रामीण पक्षी को शहरों से वापस बुलाया जा सकता है।

सकती है गौरेया

राजधानी स्थित चिडियाधर के पूर्व निदेशक और जन्म बीव विशेषज्ञ डॉ. आरएल सिंह ने बताया कि गरिया प्रामीण परिवेश की प्रमुख पत्ती है। मगर अब यह पत्ती गार्व के बजाए सहरों में अपना जीवन

लखनक, 22 मार्च 2011 देनिक जागरण

चूं-चूं करती आई चिड़िया



कुछ ऐसा करें । घर-आंगन की बिडिया गौरेया लुख हो रही है। इसकी विंता तो करनी होगी न। बस, एक सोच को अजाम दिखा है विकासनगर निवासी अतृत कुमार सिंह ने। अग्र भी इनसे सीओं और कुछ ऐसा ही करें। यह फोटो सिंह दंगित ने जैव विविधता बोर्ड को मेल की है

खुलती है नीद * जैव विविधता बोर्ड से लोगों ने बांटे अनुभव

WORLD SPARROW DAY TODAY

Save your shoebox, it's a treasured home for somebody

Anuraag Singh

■ anuraag.singh@hindustantimes.com

VARANASI: If you have bought new shoes this Holi, don't throw away the shoebox, once empty. Empty shoeboxes make an ideal nest for sparrows, the most common species of birds which now needs to be to conserved and which is considered a good omen for progress and prosperity of beings. human

On the occasion of World Sparrow Day on Sunday, which this year coincides with the festival of colours, Holi, president of Science Bloggers Assocation (Lucknow) Dr Arvind Mishra, who also heads state fisheries department in Varanasi appealed to all households not to throw away empty shoeboxes, but treasure them as they rendered ideal nests to sparrows, whose population has reportedly dwindled by up to 80 per cent in India. "In this concrete era, with skyscrapers dominating cities and towns in India, there is hardly any crevice or empty space in houses where sparrows can nest and lay eggs to increase their population," Mishra told HT on Saturday.

Empty shoeboxes rendered ideal nesting space to sparrows, particularly as their breeding season was fast approaching, he said. "By keeping shoeboxes in innocuous spaces in houses, people can give these birds an ideal self-made nesting space, as sparrows inherently love a habitat in close proximity of humans."

Mishra informed that the sparrow population had dwindled by up to 80 pc, and it was high time households started conserving the friendly birds, by at least giving them shoeboxes to make their nests.

Explaining the reasons for the dwindling sparrow population, Mishra said use of unleaded petrol triggered methyl nitrite in the environment, which killed insects and thus starved the sparrow population of their most favoured nutrition. Further, the ever increasing use of pesticides was also adversely affecting the sparrow population. Pesticide residues in the environment had been reported to make fragile the sparrow eggs, subsequently leading to birth of either stillborn sparrows or else weak ones, which died early, he

Mishra said March 20 was observed as World Sparrow Day, particularly due to efforts of Cornell Lab of Ornithology, England, Avon Wildlife Trust in England and the Eco-Sys Action Foundation in France. In India, the Save Sparrow campaign was being spearheaded by the Bombay Natural History Society, while ran awareness programme on March 20 annually to save the most auspicious and friendly bird, which liked to live in company of humans in houses, he



विश्व गौरैया दिवस आज : लगातार घट रही संख्या पर विशेषज्ञों ने जताई चिंता

होली की मस्ती में भूल न जाना गौरैया को

लखनऊ। होली के हुड़दंग और रिसर्च न होने से इस कारण को माना न भल जाइएगा। पर्यावरण को संतुलित रखने की यह महत्वपूर्ण धुरी खोती जा रही है। ऐसे में इनके संरक्षण की सख्त जरूरत है। यह अपील है शहर के उन नागरिकों की, जो गौरेया गिरावट आई है। को बचाने के लिए आगे आए हैं।

प्रेसिडेंट सुरेश चौधरी के घर में आज वे कहते हैं, इन्हीं के लिए घर में पेड भी सैकडों गौरैया की चहचहाहट सुनाई देती है। बीस वर्षों से पक्षियों की सेवा कर रहे सुरेश कहते हैं कि गौरैया का कम होना पर्यावरण की दृष्टि से ठीक नहीं है। ऐसा कहा जाता है कि शहरों में इलेक्ट्रिक और मैगनेटिक फील्ड की किरणें इनकी प्रजनन क्षमता प्रभावित करती है, लेकिन कोई

मस्ती के बीच आज नन्हीं गौरेया को नहीं जा सकता। उन्होंने कहा गौरेया जहां रहती हैं वही जगह उन्हें न मिले ' तो जाहिर सी बात है कि एक दिन विलप्त हो जाएंगी। कुछ वर्षों में इनकी संख्या में करीब 90 प्रतिशत की

ज्योतिषाचार्य.अवध बैरागी भी 32 कर्तानिया घाट फाउंडेशन के वाइस बरस से चिड़ियों को दाना दे रहे हैं। लगवाएं हैं। उन्होंने कहा गौरेया काकुन खाती हैं। दही जमाने वाले बर्तन में इनके लिए पानी रखता हं। मेरे पास तोते भी झुंड में आकर बैठते हैं। कुछ ऐसा ही नजारा किरन भागव के घर का है। वे पति राम कुमार भार्गव के साथ दिन की शुरुआत इन्हीं पक्षियों के कलखों के बीच करते हैं।



सुबह पांच के बाद यदि कमरा नहीं खुलता तो सैकडों चिडिया इनके दरवाजे पर चोंच मारती हैं। वे कहती हैं, कुछ चिड़िया हमारे घर में 15-20 पूर्व प्रमुख वन संरक्षक आरएल सिंह कहते हैं कि गौरेया अपना घोंसल नहीं बना पाती। आज युं भी सीमेंट से बनने वाले घरों में कोई खाली जगह नहीं छोड़ी जाती। इसलिए ये गुम होती जा रही हैं। शहरों में गीरया दाने और कीट पतंग खाकर जी रही है।

शहरों की ओर प्रलायन

आप भी कर सकते हैं प्रयास

- **छतों** पर तिनकों के घोंसले बनाएं
- किसी पात्र में साफ पानी रखें
- चावल के ट्टे दाने, काकन, बीज और दाने छत या मुंडेर पर रख दें।

साल से रह रही हैं। प्रमुख सचिव रहता है लेकिन शहरीकरण के कारण वन्य जीव संरक्षण बीके पटनायक ये लुप्त होने के कगार पर हैं। गौरेया के कहते हैं, सभी पक्षी कीड़े खाते हैं, संरक्षण के लिए समाज के सभी लोगों जिससे ईकोलॉजिकल बैलेंस बना को आगे आना चाहिए।

टार्युन् अ मंगलवार, 22 मार्च 2011 लखनऊ

दिल में प्यार, आँगन में रखिए दाना, गौरैया चहचहाएगी!

शहरवासियों की विश्व गौरैया दिवस पर अनोखी पहल गौरैया की गणना कर जैव विविधता बोर्ड को भेजा

विरेष्ठ संवाददाता

स्टडी हॉल में कक्षा 12 की छात्रा वर्तिका मेहरोत्रा के घर में गमलों के आसपास गौरैया फुदकती हैं। वह बताती हैं कि उनके परिवार की वर्षों पुरानी परम्परा है जिसमें पक्षियों के लिए दाना और पीने के लिए पानी रख दिया जाता है।

-महिन्द्रा फाइनेंस कंपनी में अधिकारी अतुल कुमार गुप्ता के घर में उनकी पत्नी ने गौरेया के लिए घोसला बना रखा है। इसमें वे गौरैया ही नहीं गिलहरियाँ और अन्य पक्षियों के लिए पानी और चावल के दाने नियमित रूप से रखती हैं।

-तुषार मिश्रा के घर गुलाबी बोगेनवेलिया का पेड़ है। इसमें बड़ी संख्या में गौरैया रहती हैं। कभी-कभी बुलबुल का एक जोड़ा भी आ जाता है। कबूतर और दूसरे पक्षियों का भी आना-जाना लगा रहता है

चेतन, वर्तिका, अतुल और तुषार उन दर्जनों लोगों में से कुछ नाम हैं जिन्होंने राज्य जैव विविधता बोर्ड की अधिकारी प्रतिभा सिंह की अपील पर होली के रोज रंग खेलने से पहले सुबह-सुबह उठकर विश्व गौरैया दिवस पर इस खुबसुरत पक्षी की न केवल गणना की बल्कि इनके कुछ बहुत खूबसूरत फोटोग्राफ भी खींच कर बोर्ड के ईमेल पर भेजे। प्रतिभा सिंह ने लोगों से सुबह सात बजे इस पक्षी को देखने और उनकी संख्या की जानकारी बोर्ड के ईमेल पर भेजने की अपील की थी। आईएफएस प्रतिभा सिंह अपील पर मिली



चारबाग रिश्यत चेतन मिश्र के आँगन में रोज दर्जनों गौरैया फुदकती हैं। • हिन्दुस्तान





गौरैया को बुलाने की वर्तिका मेहरोत्रा और अतुल सिंह की कोशिश भी रंग लाई। • हिन्दस्तान

प्रतिक्रिया से बेहद उत्साहित हैं। खासकर इसलिए कि लोगों ने होली के दिन रंग खेलने से पहले इस कर्तव्य को पूरा करने के लिए समय निकाला।

वर्तिका के यहाँ विश्व गौरैया दिवस पर इस पक्षी की संख्या करीब 10 थी तो अतुल सिंह ने करीब 50 गौरैया देखीं। पुषार मिश्रा ने नौ नर और आठ मादा गौरैया देखीं। अतुल ने बोर्ड को भेजे अपने ईमेल में लिखा है, 'सुबह जब मैं सोकर उठता हूँ तो खिड़की या दरवाजे पर चहचहाहट सुनाई देती है... ऐसा लगता हो कह रही हो कि मैं भूखी हूँ।

शेरवानी नगर सीतापुर रोड के रहने वाले डॉ. मुस्तफा कमाल ने गौरैया तो नहीं देखीं लेकिन सुबह अखबारों में छपी अपील पढ़ने के बाद उन्होंने अंग्रेजी में एक कविता लिखकर बोर्ड को भेजी जिसमें उन्होंने गौरैया से जुड़ी बचपन की

यादें और आज हमारी जीवन शैली और तौर तरीकों से रूठकर गायब हो जाने की पीड़ा को शब्द दिये हैं। डॉ. मुस्तफा कमाल शिया पीजी कॉलेज के सेवानिवृत्त शिक्षक हैं। इसी तरह चौक के दर्जी की बगिया में रहने वाली देवयानी बाजपेई के घर में एक पेड़ है जिसमें 100 से अधिक गौरैया हैं। उन्होंने लिखा है कि धार्मिक प्रवृत्ति के होने के कारण उनके पिता वर्षों से गौरैया व अन्य पक्षियों की देखभाल कर रहे हैं।...तभी ये यहाँ स्वच्छंद विचरण करती हैं। जेएनपीजी कॉलेज के शिक्षक आलोक मिश्रा, शक्तिनगर के फरहीन फारुकी, सहारा हॉस्पिटल की कंसल्टेंट डॉ. नीलम विनय निरालानगर में रहने वाले डॉ. मनीश खन्ना ने भी मेल भैजकर गौरैया के प्रति अपने लगाव और उनकी देखभाल के बारे में लिखा है।

The Sparrow

A LITTLE bird, with plumage brown, Beside my window flutters down, A moment chirps its little strain, Then taps upon my window-pane, And chirps again, and hops along, To call my notice to its song; But I work on, nor heed its lay, Till, in neglect, it flies away.

So birds of peace and hope and love Come fluttering earthward from above, To settle on life's window-sills. And ease our load of earthly ills; But we, in traffic's rush and din Too deep engaged to let them in, With deadened heart and sense plod on, Nor know our loss till they are gone.

- Anonymous

10-Conferences, Trainings and Tours





- National Seminar on "Status of Biodiversity -Matter of Global Concern" on 21st February 2011 organized jointly by Department of Botany, Shiv Pati Post Graduate College, Sohratgarh and Sohratgarh Environmental Society, Siddharthnagar, U.P: Dr. Ram Jee Srivastava, Sr. Scientist attended the seminar as Chief Guest and delivered a guest lecture on "Climate Change and Biodiversity Status-Major Environmental Issues". Souvenir/Abstracts of Papers was also released on this occasion.
- The Economics of Ecosystem and Biodiversity in India: Stakeholder consultations at AP Shinde Symposium hall, NASC, PUSA, New Delhi was attended by Pratibha Singh, DCF. It included sessions on Financing Biodiversity in India, Introduction to TEEB by Haripriya Gundimeda, the 6 step TEEB approach by Dr Madhu Verma, and Relevance of TEEB for stakeholders by Pavan Sukhdev. The panel discussion on the second day was on four broad topics:
 - Millenium ecosystem assessment biodiversity and economic well being connect :landscape 1. approach
 - 2. Biodiversity- relevance of attaching economic values and range of valuation tools and their applicability
 - Climate Change concerns and biodiversity conservation 3.
 - Various market and institutional solutions to conserve biodiversity ecosystem services
- 3. National Conference on Conservation of Sacred Groves to protect Local Biodiversity, February 12 to Feb 14, 2011: Chennai. Shri.RK Dubey, ACF, took part in the conference organized by the CPR Environmental Education Centre .The programme was inaugurated by Shri.R. Sundararaju, I.F.S., Principal Chief Conservator of Forests & Chief Wildlife Warden, Forest Department, Government of Tamilnadu at Puthupet. Dr. P.S. Ramakrishnan, INSA Honorary Senior Scientist, Jawaharlal Nehru University, Delhi, delivered the keynote address. During the conference, 38 eminent speakers presented their papers on specific issues of the sacred groves.
- Ambedkar Nagar, Azamgarh, Mau, Maharajganj and Gorakhpur Forest Divisions of Uttar Pradesh-26th and 27th January 2011. Shri R.K. Dubey, ACF, visited different ranges of above mentioned forest divisions in Uttar Pradesh for formation of Biodiversity Management Committees (BMC's) and to study the floristic diversity of sacred groves, if any, in the area.

11- Newspaper Clippings

(i) International News

HINDUSTAN TIMES, LUCKNOW THURSDAY, JANUARY 06, 2011

This bird used its wings as weapon

Press Trust of India

letters@hindustantimes.com

WASHINGTON:Paleontologists have discovered a chicken-sized prehistoric bird which they say used its club-like wings as a weapon during a fight.

The bird, called Xenicibis, is believed to be a member of the ibis family and lived in the Jamaican region about ten thousand years ago, said the Yale University and Smithsonian Institution research team that made the discovery.



Xenicibis

According to the researchers, Xenicibis used its specialised wings like a flail, swinging its upper arm and striking its enemies with its thick hand bones.

"No animal has ever evolved anything quite like this," said Nicholas Longrich of Yale University, who led the study.

"We don't know of any other species that uses its body like a flail. It's the most specialised weaponry of any bird I've ever seen."

As part of the new study, appeared in the Proceedings of the Royal Society B journal, the team analysed a number of recently discovered par-

tial skeletons of Xenicibis and found that the wings were drastically different from anything they had seen before.

"When I first saw it, I assumed it was some sort of deformity," Longrich said. "No one could believe it was actually that bizarre."

The bird, which was the size of a large chicken, is anatomically similar to other members of the ibis family except for its wings, which include thick, curved hand bones unlike those of any other known bird.

Jan 6, 2011: Xenicibis, a prehistoric bird and a member of the Ibis family used its specialized wings like a flail, swinging its upper arm and striking its enemies with its thick hand bones.

HINDUSTAN TIMES, LUCKNOW THURSDAY, FEBRUARY 17, 2011

Frog last seen in 1874 found again

Chetan Chauhan

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NEW DELHI: India's dwindling wildlife got a boost when biologists in Tamil Nadu found a frog after 136 years, the oldest rediscovery in the global wildlife history.

Five frogs lost 30 to 136 years ago have been found, earning India acclaim from International Union for Conservation of Nature (IUCN) and Conservation International, two leading global wildlife groups.

The most amazing discovery is of the striking green fluorescent frog, known as Chalazodes Bubble-nest, which was last seen in so, which was last seen in stoth Western Ghats in 1874. Its only specimen in the world is in a British Museum.

"After 1874 the amphibian has now been seen in Kodayar, Tamil Nadu," said Dr S D Biju, biologist with



Chalazodes Bubble-nest found after 136 years.

нт Рното

Delhi University and coordinator for an ambitious project of department of science and technology to rediscover lost 50 Indian amphibian species. India has 321 recorded amphibian species of which 13% have been lost due to human interference.

The uniqueness of the Bubble-nest is its ash blue thighs and black pupils with golden patches and its secret life, especially during the day inside the reeds. It is a frog, which does not go through the free-swimming tadpole stage.

The second discovery from south Western Ghats of Anamalai is the Dot-frog, named after Anamalai hills, where they were last seen 73 years ago. Now it has been found in Parambikulum area of Kerala. A silent amphibian, Dotfrogs croak loudly only during monsoons, especially when its hiding places get filled up with water.

While the first two discoveries were by scientists, Delhi University graduate students rediscovered Dehradun Stream Frog after a gap of 25 years in Chakrata, Uttarakhand.

The fourth and the fifth rediscovery of Silent Valley Tropical Frog, last seen 30 years ago, and Elegant Tropical Frog, last seen 73 years ago, were in Kerala and Karnataka, respectively.

India launched Lost
Amphibians Initiative with
support of former cricketer
Anil Kumble and other global partners in 2010 to trace
50 lost species, of which
five have been rediscovered.
"We are working towards
finding the remaining 45,"
Biju said.

Feb 17, 2011: Dr S D Biju of Delhi University has reported the fluorescent frog, Chalazodes bubblenest last seen in the Western Ghats in 1874!

(After over 136 years!). This is being done under the "Lost Amphibians initiative" with global partners to trace 50 species of which five have been rediscovered.

Earth's sixth mass extinction already arrived?

With the steep decline in realm," said principal author populations of many Anthony D. Barnosky, UC populations of many l species, from frogs and fish to tigers, some scientists have warned that Earth is on the brink of a mass ex-tinction like those that occurred only five times before during the past 540 million

Each of these 'Big Five' saw three-quarters or more of all animal species go extinct.

In a study published today (March 3) in *Nature*, University of California, Berkeley, paleobiologists assess where mammals and other species stand today in terms of possible extinction, compared with the past 540 million years, and they find cause for hope as well as alarm.

Risk of extinction

"If you look only at the critally endangered mammals those where the risk of extinction is at least 50 per cent within three of their gener-ations — and assume that their time will run out, and they will be extinct in 1,000 years, that puts us clearly outside any range of normal, and tells us that we are moving the mass extinction

Berkeley professor of integra-tive biology, a curator in the Museum of Paleontology and a research paleontologist in the Museum of Vertebrate Zoology.

currently threatened species - those officially classed as critically endangered, endangered and vul-nerable — actually went extinct, and that rate of extinction continued, the sixth mass extinction could arrive within as little as 3 to 22 centuries," he said.

Not too late

Barnosky Nevertheless. added, it's not too late to save these critically endangered mammals and other such species and stop short of the tip-ping point. That would require dealing with a perfect storm of threats, including habitat fragmentation, sive species, disease and global warming. "So far, only 1 to 2 per cent

of all species have gone extinct in the groups we can look at clearly, so by those numbers, it looks like we are not far down the road to ex-



THE DANGER: Critically endangered mammals are at a risk of going extinct in 1,000 years. - PHOTO: M.A. SRIRAM

tinction. We still have a lot of we are not in a crisis Earth's biota to save," Bar-nosky said. "It's very important to devote resources and legislation toward species conservation if we don't want to be the species whose activ-ity caused a mass extinction." Coauthor Charles Mar-

shall, UC Berkeley professor of integrative biology and di-rector of the campus's Mu-Paleontology seum emphasized that the small number of recorded extinctions to date does not mean

"Just because the magnitude is low compared to the biggest mass extinctions we've seen in a half a billion years doesn't mean to say that they aren't significant," he said

"Even though the magnitude is fairly low, present rates are higher than during most past mass extinctions."
"The modern global mass

extinction is a largely unadclimate change and human activ-

program director in the National Science Foundation's Division of Earth Sciences, which funded the research. "Its continued progression, as this paper shows, could result in unforeseen - and irre-

consequences to the environ-

ment and to humanity. The study originated in a graduate seminar Barnosky organized in 2009 to bring biologists and paleontologists together in an attempt to compare the extinction rate seen in the fossil record with today's extinction record. These are "like comparing apples and oranges," Barnosky said. For one thing, the fossil record goes back 3.5 billion years, while the historical record goes back only a few thousand years. In addition, the fossil record has many holes, making it is impossible to count every species that evolved and subsequently disappeared, which probably amounts to 99 per cent of all species that have ever existed. A different set of data prob-lems complicates counting

modern extinctions Dating of the fossil record

also is not very precise, Marshall said.

"If we find a mass extinction, we have great difficulty determining whether it was a bad weekend or it occurred over a decade or 10,000 years," he said. "But without the fossil record, we really significance of the impact we are having."

To get around this limita-tion, Marshall said, "This paper, instead of calculating a single death rate, estimates the range of plausible rates for the mass extinctions from the fossil record and then compares these rates to where we are now."

Mammals were chosen as a starting point as they are well studied and well represented in the fossil record going back some 65 million years. Biologists estimate that within the past 500 years, at least 80 mammal species have gone extinct out of a starting total of 5,570 species.

The team's estimate for the average extinction rate for mammals is less than two extinctions every million years, far lower than the current extinction rate for mammals.

"It looks like modern ex-tinction rates resemble mass extinction rates, even after setting a high bar for defining 'mass extinction,'" Barnosky said.

After looking at the list of threatened species main-tained by the International Union for Conservation of Nature (IUCN), the team concluded that if all mammals now listed as 'critically endangered,' endangered and 'threatened' go extinct whether that takes several hundred years or 1,000 years, Earth will be in a true mass extinction.

"Obviously there are ca-veats," Barnosky said. "What we know is based on observations from just a very few twigs plucked from the enormous number of branches

that make up the tree of life."
"Our findings highlight highlight how essential it is to save critically endangered, endan-gered and vulnerable species," Barnosky added. If most of them die, even if their disappearance is stretched out over the next 1.000 years. the sixth mass extinction will have arrived." — University of California, Berkeley



Mar 3, 2011: There is little doubt left in the minds of professional biologists that Earth is currently faced with a mounting loss of species that threatens to rival the five great mass extinctions of the geological past. As long ago as 1993, Harvard biologist E.O. Wilson estimated that Earth is currently losing something on the order of 30,000 species per year — which breaks down to the even more daunting statistic of some three species per hour. Some biologists have begun to feel that this biodiversity crisis — this "Sixth Extinction" — is even more severe, and more imminent, than Wilson had supposed.

Palaeontologists characterize mass extinctions as times when the Earth loses more than three-quarters of its species in a geologically short interval, as has happened only five times in the past 540 million years or so. Biologists now suggest that a sixth mass extinction may be under way, given the known species losses over the past few centuries and millennia. Their results confirm that current extinction rates are higher than would be expected from the fossil record, highlighting the need for effective conservation measures.

- Almost 440 million years ago, some 85 percent of marine animal species were wiped out in the earth's first known mass
- Roughly, 367 million years ago, once again many species of fish and 70 percent of marine invertebrates perished in the second extinction event.
- Then about 245 million years ago, up to 95 percent of all animals—nearly the entire animal kingdom—were lost in what is thought to be the worst extinction in history- the third extinction.
- Some 208 million years ago, another (fourth) mass extinction took a toll primarily on sea creatures, but also some land
- And in the fifth mass extinction, 65 million years ago, three quarters of all species—including the dinosaurs—were eliminated.

After each extinction, it took upwards of 10 million years for biological richness to recover. Yet once a species is gone, it is gone forever. The consensus among biologists is that we now are moving toward another mass extinction that could rival the past big five. This potential sixth great extinction is unique in that it is caused largely by the activities of a single species. It is the first mass extinction that humans will witness firsthand—and not just as innocent bystanders.

Newspaper Clippings

(ii) National News

THE MINDU . THURSDAY, FEBRUARY 3, 2011

New breeding centre soon for Siberian cranes at Keoladeo Park

The last pair of Siberian cranes was spotted here in 2002

JAIPUR: About a decade after celebrated cranes ceased to visit the Ke-oladeo National Park near Bharatpur in Rajasthan, the Union Ministry of Environ-ment and Forests is planning to take up a captive breeding programme for the rare birds in the same terrain. The last otted at the national park

It is believed that the flock, which visited South Asia from distant Siberia every winter, is extinct, though there are a few birds left in two other flocks that migrate to Iran

and China.
Union Environment and
Forests Minister Jairam Ramesh, who was at the national park to attend a workshop on wetland conservation in con-nection with the World Wet-land Day celebrations on

It is believed the flock which visited South Asia from Siberia each winter is extinct

There are, however, a few birds left in two other flocks that migrate to Iran, China

Wednesday, said the 29 sq. km. wetland's unique identi-ty as the abode of Siberian cranes could be maintained with such a breeding centre.

with such a breeding centre.
"The Siberian crane was
the identity of the park. The
grown-ups have seen them
here, but the young generation does not, any more,
identify the place with those
birds," Mr. Ramesh said.

Though the project is at a
very preliminary stage at present, the Minister said initial
ly the birds would be brought
from a breeding centre in
Belgium.

Experts, including those from the International Crane Foundation and the World-

wide Fund for Nature, would be involved in the pro-

gramme.

"We will try to get the new flock reared here to follow the flyway of the wild Siberian cranes, which used to visit Keoladeo in abundance in the past century," he

Mr. Ramesh also made known his intention to shift the lone tiger which intruded the bird sanctuary in October

to the Sariska Tiger Reserve.
Ever since C.P.1, the first
male tiger relocated to Sariska from Ranthambore, was found dead two months ago, allegedly due to poisoning, the opinion has been gaining

ground that T-7, the truant male tiger, should be moved to the tiger sanctuary, its rightful place.

thtful place. The Minister said the shifting of the tiger could take place any time now. A team of experts from the Wildlife In-stitute of India would be sent to the park in February itself

to the park in Pebruary itself to tranquilise the tiger. In fact, the irrepressible Mr. Ramesh tried to see the "rogue" tiger in Keoladeo during his current trip, but that did not materialise. T-7 had mauled a Range Officer in Ranthambore before setting

Ranthambore before setting out again on his wanderings towards the Rajasthan-Uttar Pradesh border. "This tiger shifts its loca-tion almost daily. This day, it is seemingly in some other area," park field director Anoop K.R. told The Hindu from Bharstur.

from Bharatpur.
Mr. Ramesh hoped that with the funds allocated by

the Centre — Rs.52 erore — the inflow of 400 million cu-bic feet water would be en-sured for the national park from the proposed Govard-han Drain Project. "I expect the park to receive the water from the Chambal River in another four-five months time," he said.

time," he said.

Mr. Ramesh also appealed to the officials from various States, who were present at the workshop, to get ready the details of the wetlands in their areas. At present, the country has 115 notified wet-lands, for which the Centre is providing funds for upkeep,

he noted.

The event was attended by Rajasthan's Principal Chief Conservators of Forests R.N. Mehrotra, U.M. Sahai and H.M. Bhatia, Additional Secretary to the Ministry of Environment and Forests M.F. Farooqui and Adviser to the Ministry Siddharth Kaul.

Feb 3, 2011: The last pair of Siberian Cranes was last seen in Bharatpur Sanctuary, Rajasthan in 2002. Union Minister of **Environment and Forests.** attending a workshop on wetland conservation said the birds would initially be brought from a breeding center from Belgium. He also appealed to officers from various states to get ready details of wetlands of their areas. At present, the country has 115 notified wetlands for which the center provides funds for upkeep.

THE HINDU . WEDNESDAY, MARCH 9, 2011

Jairam cancels field trials of Bt maize

Minister's intervention came after Nitish said he was opposed to such trials

Gargi Parsai

NEW DELHI: Even as the moratorium on commercialisation of Bt brinjal stands, Union Environment and Forests Minister Jairam Ramesh has asked the Genetic Engineer-Approval Committee (GEAC) to immediately withdraw its permission to Monsanto for field trials of Bt maize in Bihar.

Bt brinjal was the first, and maize is the second food crop for which the GEAC has given permission for field trials in

Mr. Ramesh's intervention came after Bihar Chief Minister Nitish Kumar told him personally that he was "opposed" to field trials of Bt maize - a food crop - in Bihar as he was not aware of the risks involved and wanted the GEAC to withdraw its per-

Letter to GEAC chief

In a letter written to the GEAC chief on March 5, Mr. Ramesh said, "Bihar CM's

- Move comes even as moratorium on commercialisation of Bt brinjal stands
- Permission should be withdrawn for all States. not just Bihar: BKU leader

phone call reinforces my belief that biotech regulation, particularly in the field of agriculture (and food crops especially) cannot be a purely scientific enterprise

"There are political considerations that will come into play and I use that term in its best people-oriented sense. Regulation in telecom or insurance cannot be equated with regulation in food croporiented biotechnology.'

A State subject

In a significant move, the Minister has asked the GEAC to give a State government at least one month's time to agree or disagree with field trials for genetically-modified (GM) crops given the fact that agriculture is a State sub-

In fact, ideally, prior approval of the State concerned should be taken before allowing GM crop field trials.

GEAC cleared

BT corn field trials

The GEAC, in December 2010, gave permission for field trials of BRL-II of Bt at five locations for rabi 2011 - Bihar (two locations), Tamil Nadu, Karnataka, and Andhra Pradesh - and at nine locations for kharif 2011 - Bihar (two locations), Tamil Nadu, Karnataka, Andhra Pradesh, Uttar Pradesh, Rajasthan, Gujarat and Madhya Pradesh. Corn is considered an extremely important crop in Bihar.

India accounts for about three per cent of world maize

production. Bihar accounts for 10 per cent, after Andhra Pradesh (17 per cent), Rajasthan (14 per cent) and Madhya Pradesh (12 per cent).

'Absolutely shocking'

Reacting to the permission given for Bt maize trials, Suman Sahai of Gene Campaign, who was awarded Padamshri this year, said, "This is absolutely shocking, coming as it does under the shadow of the review of Bt brinjal, the first food crop to be introduced in India. It is deceitful."

Kavita Kuruganti of Alliance for Sustainable and Holistic Agriculture expressed concern that "regulators and the government were not heeding democratic and scientific voices about safety aspects of GM crops.

Bhartiya Kisan Union general secretary Yudhvir Singh said: "Permission has been given surreptitiously. This is not right. We strongly oppose it. The permission should be withdrawn for all States, not just Bihar."

Genetic Engineering Approval Committee to withdraw its permission to Monsanto for field trials for Bt Maize in Bihar. The moratorium on commercialization of Bt **Brinjal** stands.

Mar 9. 2011: The Union

Minister for environment and

Forests, Mr. Jairam Ramesh

has immediately asked the

In a first of its kind in Asia, an asylum for camels

Sunny Sebastian

JAIPUR: An exclusive asylum for ailing camels has come up at Bassi, 30 km from here on the Jaipur-Agra road. Reportedly the first of its kind in Asia, the Camel Rescue Centre, set up by voluntary agency Help in Suffering (HIS), will provide veterinary and rescue facilities to the Ship of the Desert which symbolises the State of Rajasthan.

Rajasthan Tourism Minister Bina Kak formally inaugurated the centre over the weekend. "This is a muchneeded sanctuary for camels in the Jaipur neighbourhood. I appreciate the initiative," Ms. Kak said, The ELSU Foundation in Switzerland and the Animaux Secours in France have funded the proct by way of donating the land and building costs.

The camel culture of Rajasthan is unique as, rather than a source of food, as is mostly the case outside India, the animal is only meant for transportation in this desert State. Apart from be-

ing an important and ecologically sound means of transport and traction, camels are also a major attraction for tourists. As per a recent estimate of the Pali-based LIFE (Local Livestock for Empowerment of Rural People) Network, the population of camels has halved during the past one decade - from over a million to less than 500,000, and the decline is still on.

The facilities at the centre include a clinic, hospital, feed storage place, a waiting area for camel owners, residences for vets and com-pounders, library and a laboratory. "The rescue centre is located in an area on the Agra road, where many camels live and work. The place needs veterinary and rescue facilities for these neglected animals and their owners," said project-incharge and veterinarian Pradeep Singhal.

The centre will have 24hour presence of a doctor and compounder. Eleven sheds, which can accommodate one camel each, are be-

ing prepared. The Rescue Centre has been designed and constructed by Ashima Gupta and Ravi Gupta as their donation towards assistance to camels.

HIS Managing Trustee Timmie Kumar informed that the centre, which was in the making for some time, would add to the health of camels in the area and improve the economic condi-tion of camel breeders, who otherwise lack a support system in this fast changing world, Ms. Kumar said HIS, a registered animal charity organisation in Rajasthan since 2001, has been conducting camel welfare programmes to help the poorest and most marginalised village people whose livelihood depends on their camel.

Over the decade the organisation has provided 42,000 treatments and de-worming of 17,500 camels. The HIS camel team has also fixed reflectors to nearly 12,000 camel carts, thus greatly reducing the likelihood of night time collision on the Jaipur-Agra road.

Mar 15, 2011: A camel rescue center has been set up at bassi, 30 km from Jaipur to take care of camels. It includes a hospital, feed storage place, waiting area for camels, laboratory, residences for vets and compounders and a library. It will be run by the NGO HIS (Help In Suffering).

NDUSTAN TIMES, LUCKNOW TUESDAY, MARCH 29, 2011

THE TIGER FAMILY IS GROWING

The number of big cats has grown, but their space is shrinking

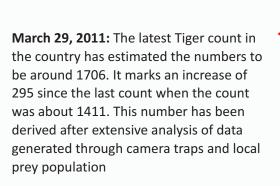
is the number of tigers in India, according to the latest count released Monday. It marks an increase of 295 from 2006

from 109 to 118 in the state. 109



■ The three-phased census cost ₹9.1 crore.

FILE PHOTO





up by 56. Earlier it was 297.

» P5

More tigers, less space

COUNT The number of big cats in India has increased from 1,411 to 1,706 in 4 years but their habitat has shrunk by two million hectares

Chetan Chauhan

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NEW DELHI: Call it a tiger paradox. The number of tigers in India has increased from 1,411 to 1,706 in four years but the total tiger area has shrunk from nine million hectares to seven million hectares.

The tiger estimation based on camera trap and DNA testing was done after a gap of four years and new areas such as Sunderbans and parts of Maharashtra, Uttarakhand, Uttar Pradesh and Northeast were included for the first time.

Despite this, south India and Terrai region in Uttarakhand and Uttar Pradesh accounted for about 40% of tigers in India. South India now has the world's highest concentration of tigers whereas Corbett with around 220 tigers has the highest tiger density in a reserve.

There was no change in the number of big cats in the Central India - touted as the tiger capital - with decline in their numbers in Madhya Pradesh, Andhra Pradesh, Orissa and Jharkhand and an increase in Maharashtra, which has surprised the wildlife experts.

"We don't agree with the number as of now," said P S Pabla, MP's Chief Wildlife Warden. There was also dissent on the estimation from Andhra Pradesh, Uttar Pradesh and Sunderbans, who doubted the methodology of the study. There were 150 tigers in Sunderbans as compared to 70 in the present estimation.

PR Sinha, director of Wildlife Institute of India, which conducted the estimation, said the number has been derived after extensive analysis of data generated through camera traps and local prey population. "The

> We don't agree with the number as of now PS PABLA

Chief Wildlife Warden, Madhya Pradesh



number of tigers has to be in proportion to the prey available," he told HT.

On the science front, K Ullas Karanth, director Centre for Wildlife Studies, said the full process of how these tiger numbers were generated for individual tiger populations and landscapes, has not been made public in a scientifically acceptable manner. "Only one scien-

The number of tigers has to be in proportion to the prey available

PR SINHA director, Wildlife Institute of India

tific paper, which explains only a part of this protocol, has been published in 2011, based on data from the last round of estimation in 2007," he said.

"One in every four sq kms of tiger area has been camera trapped," Environment minister Jairam Ramesh said, after releasing the estimation at a global conference of tiger experts.

For Ramesh, the increase was "mixed bag" as tiger home had fallen by about two million hectares and most tiger corridors were highly fragmented. It has resulted in more tiger deaths because of infighting and tiger-human conflict from Kaziranga in Assam to Corbett in Uttarakhand to Ranthambore in Rajasthan.

They (tigers) need annual ecological monitoring for protection

K ULLAS KARANTH director, Centre for Wildlife Studies

NEW DELHI: For a change, India and Bangladesh were on one wavelength saying Wildlife Institute of India has failed to estimate tiger population in Sunderbans correctlv. Sunderbans tiger reserve director Subrato Mukerjee said the tiger population on the Indian side of Sunderbans was much more than 70 as against the West Bengal government's estimate of 150. "The radio collar and camera trap did not work for months," he said.

His Bangladeshi counterpart raised a similar pitch saying that it would mean much lesser tigers in Sunderbans in Bangladesh, where estimate is of 250 tigers.

This forced V Jhala, the WII scientist, to explain the methodology but the two were not satisfied.

According to the second all-India tiger population estimation study, carried out in the designated 39 tiger reserves across the country, there has been an increase of 295 tigers in India. In the latest estimation, Karnataka has overtaken Madhya Pradesh, as the State with the most number of tigers. Tamil Nadu has seen a big jump, while Andhra Pradesh has gone down. More than 4,76,000 forest personnel were involved in data collection.

SALIENT FEATURES OF 2010 ASSESSMENT

- 1. Forest personnel involved in data collection: ~4,76,000
- 2. Number of forest beats sampled in Phase I: 29,772
- 3. Total distance walked in Phase I: ~6,25,000 km
- 4. More than 27,300 man-days of researchers
- 5. Total camera traps used: ~800
- Total area camera-trapped: ~10,500 sq. km.
- 7. Number of individual tigers camera trapped: 550
- 8. Total cost: Rs. 9.1 crore

Total cost of this count was Rs. 9.1 core.

Newspaper Clippings

(iii) State News

HINDUSTAN TIMES, LUCKNOW TUESDAY, MARCH 29, 2011

UP tiger count also on the rise

mpawan dixit@hindustantimes.com

LUCKNOW: At last there is something to cheer about for the state forest officials. The overall tiger population has gone up in the state, albeit marginally.

From 109 in the 2007 tiger census, the feline population has gone up to 118 in the state, registering a marginal increase of nine tigers.

But this increase has been in the main tiger hubs of the state. These areas are Pilibhit, Kishanpur, Dudhwa National Park, Lakhimpur Kheri and Katerniaghat wildlife reserve. In the last census the feline count only in these areas was

Union forest minister Jairam Ramesh released the Tiger Census report 2011 in New Delhi on Monday. The report states that the feline population in the Sivalik-Gangetic plane has gone up by 56, talking the total figure to 353. This region comprises more than 5000 sq km of Uttar Pradesh, Uttarakhand and Bihar.

There is no state-wise break up of the feline population in the report. But principal chief conservator of forest (wildlife) BK Patnaik, while expressing satisfaction over the Tiger Census report, attributed several reasons behind the marginal increase in tiger population in the state.

"There is 18 % increase in feline population in the state in areas famous for tiger popula-



tion which include Dudhwa National Park and its extended territories," Patnaik told HT over phone from New Delhi.

" In the last census, Sohagi Barwa region having substantial tiger population was included in Uttar Pradesh," he said adding, "But in this tiger census the region was bifurcated between UP and a portion of it went to the Valmiki Tiger Reserve, Bihar."

Offering another reason for overall marginal increase of tiger population in the state, Patnaik said, "The Sohelwa region at the Indo-Nepal border has a floating tiger population. As tigers in the region constantly move between India and Nepal, so their population in this region could not be ascertained," he added.

To keep the tiger count growing, the principal chief conservator of forest (wildlife) promised tough measures against poachers and encroachments in wildlife reserves in the state.

Count Sparrows This Sunday

Also Called 'Gauraiya' That Nests In Residential Areas Is Disappearing Fast



Mar 18, 2010: An appeal was made to the public through newspapers to count and report the number of sparrows they see on Sunday, March 20, to create awareness about the common sparrow.

City feels for its feathered friends

sedia for a cause, pe espond to it. This exe

March 21, 2010: The UP State Biodiversity Board got many responses from public about the sparrows they had seen and recorded.

Population Estimate of Tigers in India,2010

SI. No	District	Total Number 2010	Lower SE	Upper SE
1.	Uttarakhand	227	199	256
2.	Uttar Pradesh	118	113	124
3.	Bihar	8	8	8
4.	Andhra Pradesh	72	65	79
5.	Chattisgarh	26	24	27
6.	Madhya Pradesh	257	213	301
7.	Maharashtra	169	160	196
8.	Orissa	32	20	44
9.	Rajasthan	36	35	37
10.	Jharkhand	10	6	14
11.	Karnataka	300	280	320
12.	Kerala	71	67	75
13.	Tamil Nadu	163	153	173
14.	Assam	143	113	173
15.	Mizoram	5	5	5
16.	Sunderbans	148	118	178
	Total	1706	1571	1875



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