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RSPN launched two publications on His Majesty's Birth Anniversary



>> Lyonpo Dr. Pema Gyamtsho graced the launch as the Guest of Honour

The Royal Society for Protection of Nature (RSPN) launched two books titled "Bhutan's Natural Heritage: A Legacy of the Monarchs" and "Nature, Wildlife and People: Living with Nature in Phobjikha Conservation Area" on 21st February 2010, on the occasion of His Majesty's 30th Birth anniversary.

The books were launched by His Excel-

lency Lyonpo (Dr.) Pema Gyamtsho, the Minister of Agriculture and Forest at Hotel Taj Tashi, Thimphu. The event was attended by H.E Lyonpo Dorji Wangdi, MoLHR, H.E Lyonpo Minjur Dorji, MoHCA, H.E Thrizin Namgay Penjor of National Council, several eminent members of the parliament, dignitaries and officials of the Royal Government and representatives of the International

>> *Contd. on page 2*

Regional Workshop on Climate Change



>> Participants of the workshop

The Royal Society for Protection of Nature, in collaboration with Climate Action Network South Asia (CANSA), organized two days civil society workshop in Punakha. The workshop held on 2-3rd February 2010 was geared towards developing NGO strategies in South Asia to fight the climate change. Since the time of its inception, the beliefs in integrated action towards climate change have brought majority of civil societies under one fold – Climate Action Network South Asia (CANSA) and RSPN is the member.

Participants for the workshop from Bangladesh, Bhutan, India, Nepal and Pakistan were selected on the basis of role played in CANSA, seniority and experience on climate change. The Bhutanese participants, from var-

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RSPN launched two publications on His Majesty's Birth Anniversary



>> The Guest of honours delivering his keynote address

and national NGOs.

RSPN considers this day most timely and appropriate occasion to pay tribute to our Monarchs whose visionary leadership made Bhutan richly endowed in its natural heritage and brought our country to the forefront of global environmental conservation. Through these publications, RSPN wishes to bring out

the extraordinary contributions of our Kings in safeguarding our environment and natural heritage, while also taking stock of Bhutan's natural resources and the challenges we face in sustaining them.

The book 'Bhutan's Natural Heritage: A Legacy of the Monarchs' calls on the Royal Government and the Bhutanese for contin-

ued efforts to preserve the natural environment of Bhutan, especially in the context of the fragile Himalayan ecosystem which is vulnerable to disasters.

A total of 3000 copies have been printed, out of which 1000 will be available for free distribution to schools, institutions and government and non-profit entities. The remaining 2000 will be put on sale through various book stores. The proceeds from the sale will be used for similar publications of RSPN. The publication was financially supported by the Embassy of Finland, New Delhi.

'Nature, Wildlife and People: Living with Nature in Phobjikha Conservation Area' is an educational publication based on the information generated from several years of RSPN's engagement in conservation of Phobjikha. The book is published both in English and Dzongkha and is an important resource for non-formal education centers and schools as it provides holistic understanding of the natural environment and the socio-cultural dimensions in Phobjikha. Although the book was developed for local use within Phobjikha, it can be a valuable resource to the outsiders as well. With the financial support from MacArthur Foundation, USA, this initiative is part of RSPN's efforts in strengthening status of Phobjikha as a conservation area.

Training for Community Forest Executive Members



>> The members being trained by foresters

The RSPN, in coordination with Trashigang Forestry Sector, trained executive members of the community forest under Kangpara and Thrimshing geogs at Lamyoung in Kangpara from 4th-7th February 2010. A total of 15 CF executive members from CFs of Berdungma under Thrimshing geog, Merda, Lamyoung, Maduwa and

Passangphu under Kangpara geog attended the training. The training focused on book-keeping, financial management and practical training on opportunities on silviculture.

The objectives of the training were to train the CF members on forest inventory and regulations for self functioning and organization; to train the CF members on

proper accounting and management and to train the CF members on silviculture options and CF development approaches.

A similar training was initiated for the Community Forest Executive Members under Lumang and Khaling geogs in Moshi Non-formal Education Center from 18th-21st February 2010. About 22 CF executive members from CFs of Moshi, Wagkhar, Dungmanma and Drupkhang under Lumang geog, and Bjeri, Lemi, Lamdokska and Nam-seling under Khaling geog attended the training. The above training was lead by Dungkhag Forest Officers of Wamrong and Thrimshing Dungkhag Administrations, Forest Officers of concerned geogs and Range Officers from the Dungkhag Territorial Forest Office.

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Regional Workshop on Climate Change

ious likeminded NGOs, were invited with the hope to build a partnerships and proper networking in working towards climate change. At the end of the workshop, participants were able to map expectations from a network and identify the clear set of activities. Strategies to strengthen institutional arrangements within network and its member organizations were spelt clearly.

Annual Census on the Black-Necked Crane (2009-2010)

PHOBJIKHA

The statistics on the Black-necked Cranes' annual arrival in the valley show that the number has been increasing gradually from 102 in the early 1990s to 326 in 2009-2010 winter, including 28 juveniles. The highest record of annual arrival of Black-necked Cranes in Phobjikha valley was recorded in the year 2005-2006 with 353 individuals. The record shows that the first group of Black-necked Cranes, comprising of two adults and a juvenile, arrived in the valley on 29th Oct 2009 and the first group leaving the valley was observed on 15th Feb 2010.

2009-2010 Winter Census:

Phobjikha	326 (28 Juveniles)
Bomdiling	123 (18 juveniles)
Khotokha	9
Bumthang	Thangbi : 2 Gaytsa : 2
Total:	462 cranes

Crane Predation Study:

With the assistance from the officials of Jigme Singye Wangchuk National Park, a total of nine camera traps were set up in the wetland this year in order to study the predators associated with the killings of Black-necked Cranes. The cameras captured nine different pictures of a common leopard at different times, of which, four pictures show a common leopard dragging a crane. These photographic images also confirm the scat analysis report from a DNA test, conducted in collaboration with the Department of Forest in 2008, when several cranes were lost.

The camera traps also caught the pictures of Sambar Deer (*Rusa unicolor*) and Wild Pig (*Sus scrofa* Spp.), which at times disturbed the peaceful sleep of the cranes.

Alongside the surveillance with camera traps, evidences of predators like scats, feathers and bones were also collected from the probable predator trails. The assessment found evidences of eight carnivore droppings and tracks, including the yellow-throated martens (*Martes flavigula*), leopard cats (*Felis bengalensis*) and Asiatic golden cats (*Catopuma temmincki*). This season alone, a total of nine Black-necked Cranes were killed and one injured.

Since their existence enriches the biodiversity of Phobjikha, the loss of cranes to the predators had created concerns and debates among the Bhutanese who were aware of the significance of crane conservation. Although, the predator-prey relationship is a natural phenomenon to maintain the ecological balance, identification of the predator in this case was important to carry out appropriate interventions to protect the cranes. Following the ecological and social concerns, RSPN set up strict vigilance and constant monitoring over the last few years to protect the bird's habitat in the face of more unnatural predation in the form of developments that are not necessarily conducive to sustain a healthy population of this bird species.

Crane Roosting Areas in Phobjikha:

It was observed that starting 2008-2009 winter, cranes have started roosting in several new spots. A total of nine roosts were used this winter. Other than the two maintained roosts, which have water ponds, the rest of the roosting spots are either with small ponds or marshy areas.

BUMDELING

The Black-necked Crane count in Bomdiling for 2009-2010 winter saw an increase by seven individuals compared to 2008-2009 winter. A total of 123 cranes, including 18 juveniles, arrived for their winter sites last winter while only 116 cranes were seen in 2008-2009. A constant monitoring of the crane count in the valley is recorded by the Caretaker, Mr. Phurba Wangdi who informs the RSPN on every count.

KHOTOKHA

A total of nine adult Black-necked Cranes were counted in the valley of Khotokha in 2009-2010 winter compared to six in 2008-2009 as monitored and reported by the officials of Forest Management Unit in Khotokha.

BUMTHANG

Gaytsa village, under Chumey Geog and Thangbi, under Chokhor Geog in Bumthang were two winter habitat for the endangered Black-necked Cranes. As per the RSPN record, the highest number of crane arrival in the winter of 1994-1995 was twenty three individuals. Since then, the annual crane arrival in Bumthang has been decreasing with the total of twelve in 2008-2009 winter and four in the winter of 2009-2010. The reason for the decline is yet to be studied.

A total of 462 Black-necked Cranes arrived at various roosting sites in the winter of 2009-2010 while 2008-2009 winter saw only 457 individuals.

Conference of Parties (COP15) in Copenhagen

Over 192 countries and 125 head of the states participated in the Fifteenth Conference of Parties (COP15) to the United Nations Framework Convention on Climate Change (UNFCCC) held in the city of Copenhagen, Denmark from December 7-18, 2009.

COP15 has been an important climate change negotiation platform to agree on the Bali road map - Kyoto Protocol (KP) and Long-term Cooperative Action (LCA), since COP13 in Bali. Several intersessions were held before COP15 within the Ad-Hoc Working Groups on KP and LCA. The draft decisions from those intersession were brought to Copenhagen.

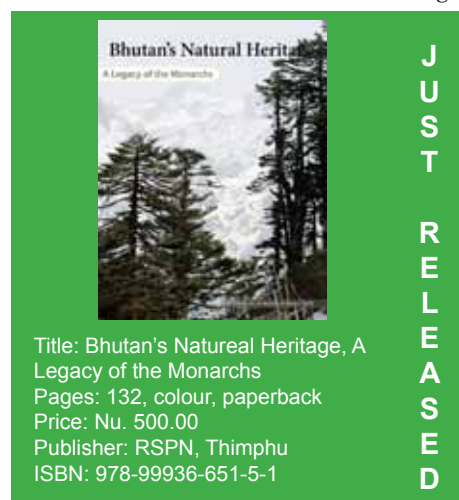
After two weeks of intensive discussions and negotiations, including the high level segment, the conference ended with the "Copenhagen Accord" agreed by only few countries. The decisions of the COP on KP and LCA

still remains in the draft form and the COP has adopted and decided to continue working on it to present the outcome at COP16 in Mexico.

For the COP 15, the Bhutanese delegation was lead by Dr. Pema Gyamtsho, Minister of Agriculture, and technical negotiators from National Environment Commission and other in line agencies. There were also representatives from our local civil society, media and youth at the COP15.

RSPN has been following the conference since COP11 in Montreal as part of the Capacity Strengthening of Least Developed Countries for adaptation to Climate Change (CLACC) Program. The RSPN, in the course of time, have also carried out research studies in the field of human health and Climate Change and initiated the vulnerability mapping assessment of Thimphu city. The sensitization workshop on Climate Change was

organized, in collaboration with Climate Action Network South Asia (CANSA), in October 2009 involving all relevant stakeholders. The meeting of the Civil Society Organizations of the South Asian Nations was also organized in February 2010 to keep abreast of the activities and events on Climate Change.



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Extinction crisis continues apace

The latest update of the IUCN Red List of Threatened Species™ shows that 17,291 species out of the 47,677 assessed species are threatened with extinction.



© Brad Wilson

>> Rabbs Fringe-limbed Treefrog (*Ecnomiohylla rabborum*)

The results reveal 21 percent of all known mammals, 30 percent of all known amphibians, 12 percent of all known birds, and 28 percent of reptiles, 37 percent of freshwater fishes, 70 percent of plants, 35 percent of invertebrates assessed so far are under threat.

“The scientific evidence of a serious extinction crisis is mounting,” says Jane Smart, Director of IUCN’s Biodiversity Conservation Group. “January sees the launch of the International Year of Biodiversity. The latest analysis of the IUCN Red List shows the 2010 target to reduce biodiversity loss will not be met. It’s time for Governments to start getting serious about saving species and make sure it’s high on their agendas for next year, as we’re rapidly running out of time.”

Of the world’s 5,490 mammals, 79 are Extinct or Extinct in the Wild, with 188 Critically Endangered, 449 Endangered and 505 Vulnerable. The Eastern Voalavo (*Voalavo antsahabensis*) appears on the IUCN Red List for the first time in the Endangered category. This rodent, endemic to Madagascar, is confined to montane tropical forest and is under threat from slash-and-burn farming.

There are now 1,677 reptiles on the IUCN Red List, with 293 added this year. In total, 469 are threatened with extinction and 22 are already Extinct or Extinct in the Wild. The 165 endemic Philippine species new to the IUCN Red List include the Panay Monitor Lizard (*Varanus mabitang*), which is Endangered. This highly-specialized monitor lizard is threatened by habitat loss due to agriculture and logging and is hunted by humans for food. The Sail-fin Water Lizard (*Hydrosaurus pustulatus*) enters in the Vulnerable category and is also threatened by habitat loss. Hatchlings are heavily collected both for the pet trade and for local consumption.

“The world’s reptiles are undoubtedly suf-

fering, but the picture may be much worse than it currently looks,” says Simon Stuart, Chair of IUCN’s Species Survival Commission. “We need an assessment of all reptiles to understand the severity of the situation but we don’t have the \$2-3 million to carry it out.” The IUCN Red List shows that 1,895 of the planet’s 6,285 amphibians are in danger of extinction, making them the most threatened group of species known to date. Of these, 39 are already Extinct or Extinct in the Wild, 484 are Critically Endangered, 754 are Endangered and 657 are Vulnerable.

The Kihansi Spray Toad (*Nectophrynoides asperginis*) has moved from Critically

Endangered to Extinct in the Wild. The species was only known from the Kihansi Falls in Tanzania, where it was formerly abundant with a population of at least 17,000. Its decline is due to the construction of a dam upstream of the Kihansi Falls that removed 90 percent of the original water flow to the gorge. The fungal disease chytridiomycosis was probably responsible for the toad’s final population crash.

The fungus also affected the Rabb’s Fringe-limbed Treefrog (*Ecnomiohylla rabborum*), which enters the Red List as Critically Endangered. It is known only from central Panama. In 2006, the chytrid fungus (*Batrachochytrium dendrobatidis*) was reported in its habitat and only a single male has been heard calling since. This species has been collected for captive breeding efforts but all attempts have so far failed.

Of the 12,151 plants on the IUCN Red List, 8,500 are threatened with extinction, with 114 already Extinct or Extinct in the Wild. The Queen of the Andes (*Puya raimondii*) has been reassessed and remains in the Endangered category. Found in the Andes of Peru and Bolivia, it only produces seeds once in 80 years before dying. Climate change may already be impairing its ability to flower and cattle roam freely among many colonies, trampling or eating young plants.

There are now 7,615 invertebrates on the IUCN Red List this year, 2,639 of which are threatened with extinction. Scientists added 1,360 dragonflies and damselflies, bringing the total to 1,989, of which 261 are threatened. The Giant Jewel (*Chlorocypha centripunctata*)



© Kai Schuette

>> Giant Jewel (*Chlorocypha centripunctata*)

punctata), classed as Vulnerable, is found in southeast Nigeria and southwest Cameroon and is threatened by forest destruction.

Scientists also added 94 molluscs, bringing the total number assessed to 2,306, of which 1,036 are threatened. All seven freshwater snails from Lake Dianchi in Yunnan Province, China, are new to the IUCN Red List and all are threatened. These join 13 freshwater fishes from the same area, 12 of which are threatened. The main threats are pollution, introduced fish species and over-harvesting.

There are now 3,120 freshwater fishes on the IUCN Red List, up 510 species from last year. Although there is still a long way to go before the status all the world's freshwater fishes is known, 1,147 of those assessed so far are threatened with extinction. The Brown Mudfish (*Neochanna apoda*), found only in New Zealand, has been moved from Near Threatened to Vulnerable as it has disappeared from many areas in its range. Approximately 85-90 percent of New Zealand's wetlands have been lost or degraded through drainage schemes, irrigation and land development.

"Creatures living in freshwater have long been neglected. This year we have again

added a large number of them to the IUCN Red List and are confirming the high levels of threat to many freshwater animals and plants. This reflects the state of our precious water resources. There is now an urgency to pursue our effort but most importantly to start using this information to move towards a wise use of water resources," says Jean-Christophe Vié, Deputy Head of the IUCN Species Programme.

"This year's IUCN Red List makes for sobering reading," says Craig Hilton-Taylor, Manager of the IUCN Red List Unit. "These results are just the tip of the iceberg. We have only managed to assess 47,663 species so far; there are many more millions out there which could be under serious threat. We do, however, know from experience that conservation action works so let's not wait until it's too late and start saving our species now."

The status of the Australian Grayling (*Prototroctes maraena*), a freshwater fish, has improved as a result of conservation efforts. Now classed as Near Threatened as ctes opposed to Vulnerable, the population has recovered thanks to fish ladders which have been constructed over dams to allow migration, enhanced riverside vegetation and the education of fishermen, who now face heavy

penalties if found with this species.

Source: www.iucn.org
Published date: 3 November 2009

IUCN, the International Union for Conservation of Nature, helps the world find pragmatic solutions to our most pressing environment and development challenges. It supports scientific research, manages field projects all over the world and brings governments, non-government organizations, United Nations agencies, companies and local communities together to develop and implement policy, laws and best practice.

IUCN is the world's oldest and largest global environmental network - a democratic membership union with more than 1,000 government and NGO member organizations, and almost 11,000 volunteer scientists in more than 160 countries.

IUCN's work is supported by more than 1,000 professional staff in 60 offices and hundreds of partners in public, NGO and private sectors around the world. The Union's headquarters are located in Gland, near Geneva, Switzerland.

Clean Bhutan Steering committee members visits Costa Rica



>> The Clean Bhutan Steering Committee members with their counterparts in Costa Rica



To enhance the capacity of the project steering committee members, a five member committee of Clean Bhutan Program made a weeklong exposure trip to Costa-Rica to initiate experience sharing between Costa Rica and Bhutan.

During the weeklong tour in Costa Rica, the members visited several waste management centers and met with the municipal authorities, communities and informal stakeholders involved in the waste management

sector. The highlights of the tour were the recycling facilities established and the systematic collection of various wastes.

The tour provided opportunities to the project committee members to visit successful waste management projects sites in Costa-Rica and replicate those practical activities in Bhutan. It also provided ample of opportunities for the team to widen their understanding on waste management and resource recovery facilities, and to encourage private sector par-

ticipation in the waste management activities by initiating small scale resource recovery activities in the country, and divert waste stream from going to the landfill.

The tour was organized by ACEPESA (lead organization for the Clean Bhutan and Costa Rica waste management project) from 20 - 26th March 2010 with financial support from Programme for South- South Cooperation.

Visit www.rspnbhutan.org for latest news and reports on RSPN's activities.

RSPN is now on Facebook and Twitter.

WORD SAFARI

In this edition, we have compiled some basic important terminologies related to Climate system from *Manual on Climate Change and Health* recently published by RSPN.

Find and encircle the texts highlighted in bold letters. We have encircled one to help you get start with.

The Climate system is an interaction among five major components of the earth:

- **Atmosphere** is the envelope of air surrounding the surface of the Earth.
- **Hydrosphere** includes all liquid surfaces of the Earth such as fresh water (**aquifers**, rivers and lakes) and saline water (seas and oceans)
- **Biosphere** is all living systems on the surface of Earth and their interaction with each other.
- **Lithosphere** is the land content of the Earth like its rigid outermost shell.
- **Cyrosphere** includes the ice sheets, **permafrost** (permanently frozen grounds), glaciers, and snowfields.

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