

EDGE



Successful production of cole crops in winter by NCOA

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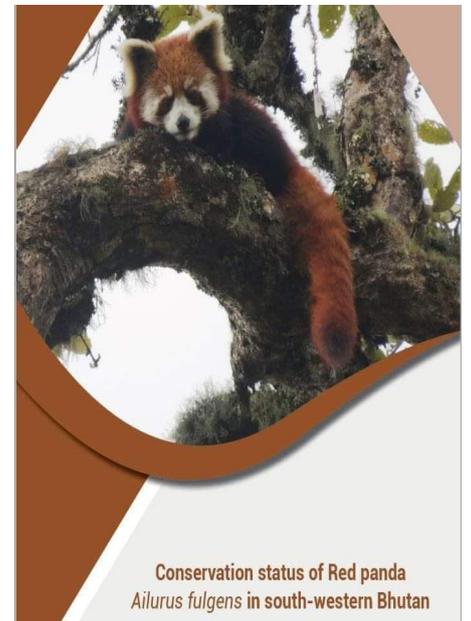


The Ministry's Week

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Report on red panda conservation in south-western Bhutan

DoFPS



Conservation status of Red panda *Ailurus fulgens* in south-western Bhutan

Red panda are unique species classified as carnivores but essentially feeding on bamboos. They are the only species remaining in their taxonomic family Ailuridae and are a living relict of the past. Red pandas are one of the few animals on the planet that can climb straight down a tree with its head first.

The species is regarded as the most 'Evolutionary Distinct and Globally Endangered' bearing the tag EDGE species. In Bhutan, red panda has a wide distribution range in the temperate forests, spreading across 17 districts.

The species is protected under schedule I of the Forests and Nature Conservation Act of Bhutan and their conservation is guided by the Red Panda Conservation Action Plan (2018-2023).

The technical report titled "Conservation status of Red panda *Ailurus fulgens* in south-western Bhutan", has been released. It is an outcome of conservation and survey works conducted in the four divisions of Gedu, Samtse and Dagana, and also Jigme Khesar Strict Nature Reserve in the last one and half years.

The report highlights the status of red panda prevalence and distribution in these divisions and park and identify prime red panda habitats in the landscape with potential connectivity amongst the prime habitats.

Red panda was positively recorded in these divisions as evident from direct sightings, camera trap photo captures, and detection of red panda pellets. They were distributed within the forest types of Fir, Mixed conifer and Cool-broadleaf Forest with thick bamboo undergrowth.

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Species distribution modelling using MaxEnt showed that in the study landscape comprising of 6365.35 km², only 10% of the area is predicted as the potential habitat for red panda. Amongst the landscape, Gedu Forest Division (4.2%) has the maximum potential habitat followed by Jigme Khesar Strict Nature Reserve (3.1%), SFD (1.6%) and least in Dagana Forests Division (1.1%). The study identified 12 prime habitats in the study landscape and mapped 14 potential habitat linkages.

Anthropogenic disturbances such

as timber harvesting, livestock grazing and prevalence of stray dogs were found to be major threats in the red panda habitats.

People's knowledge on red panda were low, with very less respondents having direct sighting of red panda. However, people valued conservation of the species because the species does not come in conflict with people.

Increased awareness programme is expected to further influence positive attitude of the local people towards red panda

conservation. The study recommends periodic monitoring of the species in the landscape, spatial conservation planning, strengthening partnership with local communities to strengthen conservation, and exploring other non-invasive methods such as genetics to enhance red panda information in Bhutan.

The conservation project was funded by Red Panda Network, Nepal, WWF Bhutan, RSPN Bhutan and Royal Government of Bhutan. A copy of the report is available here:

https://www.researchgate.net/.../359106291_Conservation...



Successful production of cole crops in winter by NCOA

NCOA, Yusipang



You can grow Broccoli, Cabbage, Cauliflower and Sag from December to March at over 2,000 metres above sea level. Located at above 2,000 metres above sea level, the western region of Thimphu, Paro and Haa face shortage of fresh, green vegetables from December to March.

NCOA Yusipang successfully experimented the production of cole crops; broccoli, cabbage, cauliflower and sag (leafy greens)

in winter. Broccoli (Centauro), cabbage (Golden cross), cauliflower (Snow mystique) and sag (local) were cultivated in protected plastic houses/green houses.

A plastic house is a simple, proven climate resilient agricultural technology which can be used to produce fresh crops.

Seeds of cole crops were sown on 6th August 2021 and the

seedlings were transplanted one-month later. Fresh harvests of broccoli, cabbage and cauliflower could be staggered from mid-January till March. Sag (leafy green vegetable) which is much in demand was transplanted in November and harvested from December which will go until March.

Plastic houses during winter can be effectively utilized. This is how protected agriculture works.



The annual white-bellied Heron population survey 2022 conducted

RSPN & DoFPS



The five-day annual population survey or rather a census of White-bellied Heron (WBH) in Bhutan was conducted from 16-20 March in collaboration with Department of Forest and Park Services (DoFPS) and Local Conservation Support Group members (LCSGs). This is the 20th Annual WBH Population survey, signifying the two decades of RSPN's engagement in annually surveying the WBH and reporting the population status and trend to the nation.

The survey was conducted nationwide where more than 100 enumerators visited along the White-bellied Heron landscape

in Bhutan and documenting the sighting of WBH and other avifauna.

This year's survey was conducted in restricted mode due to current prevalent situation of COVID-19 pandemic. But the survey methodology remained the same as it has been used in past years to avoid bias in gathering the data.

The enumerators were briefed virtually of survey protocols and deployed in pre-designated zones of restrictive movement prescribed as per the COVID-19 protocols of respective Dzongkhag. The survey took place daily starting 16th March till 20th March. A

data collection was done using Epicollect5 data collection platform under the project "WBH Population Survey".



Leisure

lychee: Erinose mites

Erinosemite damage on lychee: Initial attack giving young leaves a distorted and silvery appearance (left), leaves then become brownish (centre), and finally results in the formation of the dark brown velvety/woolly growth (right). [Pictures taken in Tsirang]

What is it?

The dark brown velvety growths result from the feedings of erinosemites on the underside of the leaves. Infested young leaves appear silvery, bumpy and distorted and turn brown as they age, giving rise to the dark brown velvet growth.

Erinosemite damage on lychee: Initial attack giving young leaves a distorted and silvery appearance (left), leaves then become brownish (centre), and finally results in the formation of the dark brown velvety/woolly growth
What to do if found in your area?

- Cut all infected parts and burn them.
- Sulphur sprays are said to be useful if applied targeting new flushes.
- Contact NPPC for support.

About 73% of calcium available in the food supply is provided by milk and milk products. Milk is packed with essential nutrients including protein, calcium and vitamin D.

JOKES



A dairy farmer walks in to his feed store and asks the clerk, "Has your product recently changed?" "Same formula for two decades now" replies the clerk. "Why do you ask? Your cattle not eating?"

"No, it's not that. It's just that their flatulence has become unbearable. It used to not bother me, but it's got to the point that I can't even be in the barn without wearing a respirator."

"That's strange. Farmer Brown had the same problem with his cows a few years ago."

"You don't happen to remember what he did about it, do you? I'm desperate here" the farmer asked.

"I do in fact" the clerk responded, "he mixed 4.5 ounces of turpentine into every gallon of water he gave them."

"Thanks. I'll give it a try."

Five days later, the farmer comes storming back into the feed store shouting, "I did what you said and my cows are all dead!"

"Now that is strange" the clerk replies "And why exactly is that strange?" the farmer demanded to know. "Because the exact same thing happened with Farmer Brown's cattle."

Did you know?

Please submit your articles for RNR-Newsletter at

communication@moaf.gov.bt



The Ministry's week

Bhutan at APRC-36



Bhutan attended the 36th Session of the FAO Regional Conference for Asia and the Pacific (APRC) which held virtually in Dhaka, Bangladesh from March 8 to 11. A Bhutanese delegation was led by the Hon'ble Sanam Lyonpo, Yeshey Penjor.

Convened by the Food and Agriculture Organization of the United Nations, ministers

and officials from 46 Asia-Pacific countries took part in the conference conducted in a hybrid mode, to address the damage done to economies and livelihoods in the food and agriculture sectors by the COVID-19 pandemic, animal and crop diseases and the ongoing disruption caused by the climate crisis.

Hon'ble Sanam Lyonpo attended the 36th Session of FAO APRC

Speaking to the forum as the Chair of the 35th Session of APRC which was hosted virtually by Bhutan in 2020, Lyonpo highlighted some deliberation points discussed in the last APRC such as leveraging the potential of digitalization and innovation, water resource management and the need to urgently act on the impacts of climate change.

While the COVID pandemic continues to take toil in the region,



Lyonpo said that through sound policies and programs on resilient agri-food systems, nutrition-sensitive food diversification among others, the region can accelerate recovery and advance further.

Going forward, Lyonpo urged member countries to work in the spirit of hope, perseverance and collectivism to address the challenges the region is facing.

Million fruit tree plantation launched at Yoeselpang

The Million Fruit Tree Plantation (MFTP) is a vision of His Majesty the King to enhance farmer's income and nutrition. It is supported through the De-Suung National Service. Its objective is to introduce technically suitable diverse high value fruit crops to enhance income of the rural

households. The initiative will help 140,827 rural farming households throughout the country to plant at least one million fruit trees.

The launching of the million fruit tree plantation was graced by Hon'ble Sanam Lyonpo Yeshey Penjor as the chief guest at Yoeselpang.



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