BioRealm-DC

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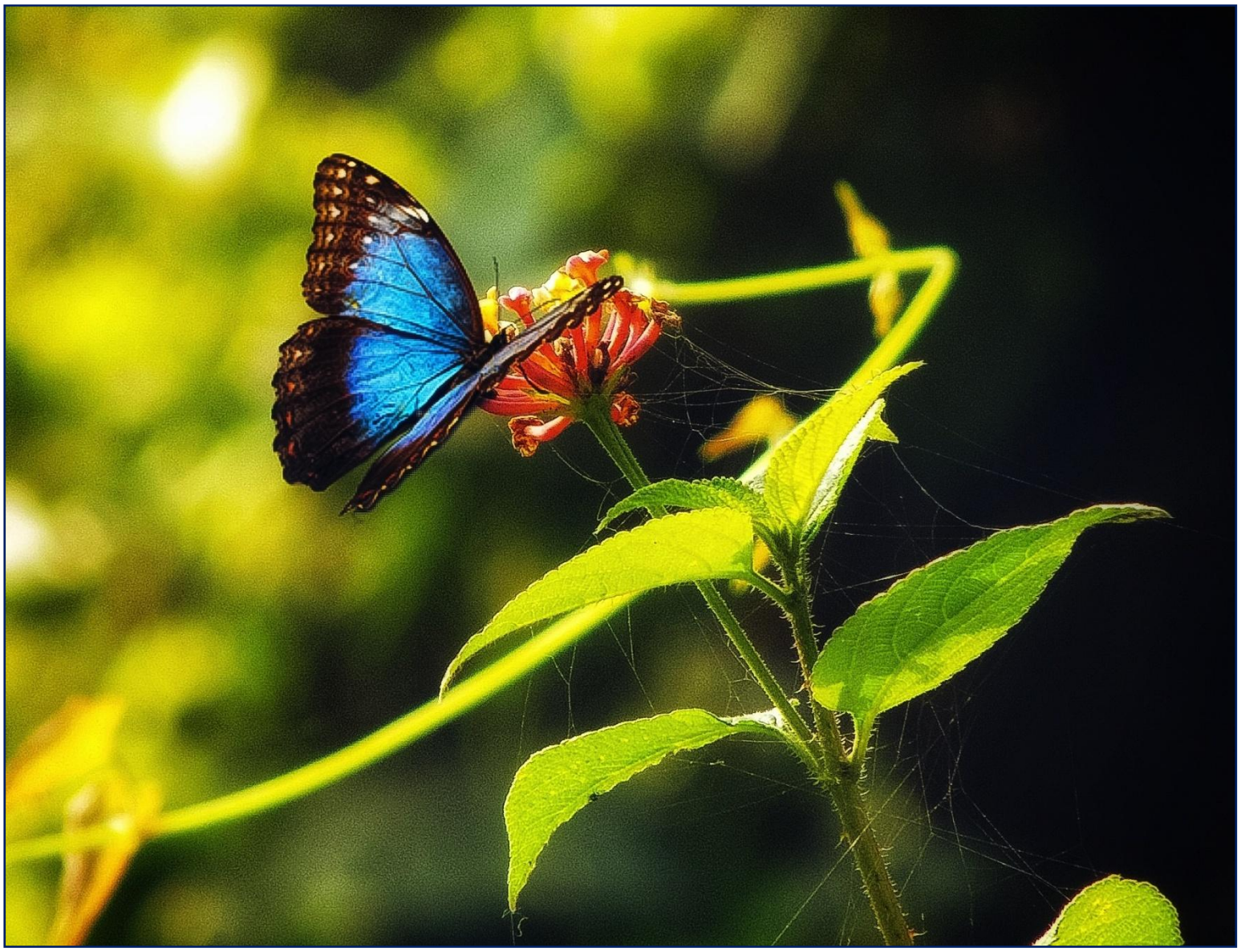
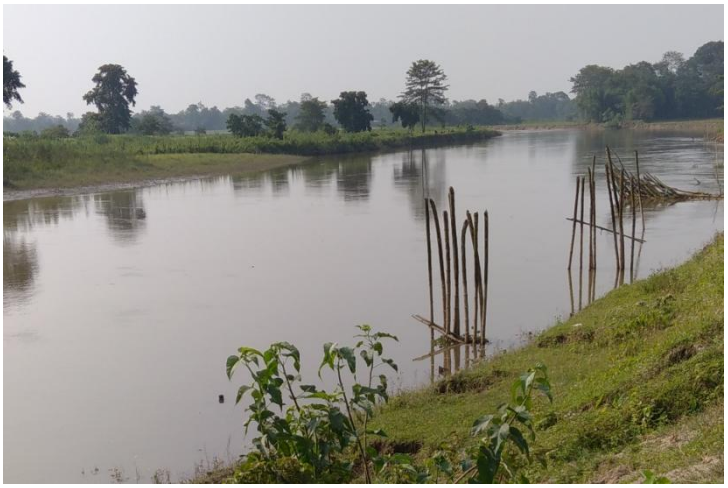


Department of Zoology
Dhemaji College

Save Charikaria to save River Dolphin

Anuj Upadhyaya
6th Semester

Charikaria is a perennial river flowing through the border area of Lakhimpur and Dhemaji district which is regarded as the lifeline of Dhakuakhana. Up to last decades of twentieth century, the Charikaria river was pollution free. At that time, it was the favourable habitat for river dolphin (*Platanista gangetica*). However, gradually the river was polluted with various pollutants such as agricultural chemical fertilizer, pesticides etc. which are used by the people in agricultural fields. In addition to that, soil erosion and construction of dams causes deposition of silt within the river which leads to reduction of the depth of the river and also causes pollution to the water. Due to this causes, now a days there is a decline of water dolphin habitat within the river. Since, Charikaria meets with the Subansiri River, the river dolphin comes from the Subansiri during the summer season. During the last decades of 20th century, a school of dolphin were witnessed every year in summer season in an interval of 2-3 days. They were travelling both upstream and downstream directions of the river, according to the local peoples. The author of this report was also witnessed of river dolphin in childhood. The dolphins are very much pollution-sensitive, so their presence is decreased in the river. According to the local folk, few dolphins were seen for the last time in Charikaria river in 2020 swimming towards upstream of the river. The presence of river dolphin in Charikaria River was also mentioned by environmentalist Anwaruddin Chaudhury in his book "Mammals of North East India" in the page number 221. It is high time to protect Charikaria River from pollution which arises as one of the alarming threat. Otherwise we lost the endangered species of river dolphin.



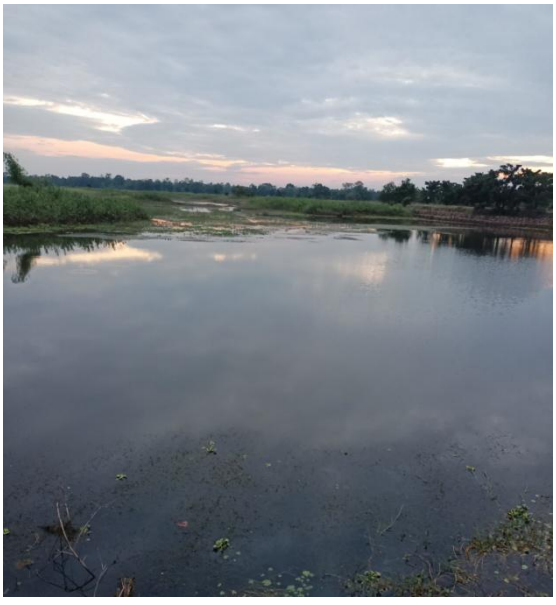
Humans to be extinct within the next 40-50 years; says UN

Dhiranjit Dihingia
4th Semester

Mother nature, from who we all have been created is in the danger. The world most important thing is dying also known as soil. Soil I also living with us. A fist full of soil has 8-10 billion of organisms. This organism helps in providing abundant nutrition to the plants and because of that we are able to produce our food. Soil is falling across the world: every 5 seconds a soccer pitch of soil is eroded and is estimated that by a 2050 around 90% of earth soil could be degraded. What does this mean for people and planet, and can we do to restore a healthy balance to the soil we need to survive? (By national geography). On taking up the example of our beautiful Assam, more than 65 percentage of its total area is under agriculture, 95 percentage of our food is grown top soil, and is disappearing 10 time faster than it is being replaced. If this process is continuous than this situation leads to the intensification of agriculture factor and the fragmentation of land holding, such situation causes serious damage to the land and the economy of the state.

Jorkata Salmari Beel is under the threat of extinction

Nabajit Baruah
6th Semester



The Jorkata beel is located in the 3 no. Khalihamari village under Jorkata gram panchayat of Machkhowa mouja of Dhemaji district. According to the age old inhabitant of the village,the beel is about 72 years old. Up to last two decades of 20th century, the beel was rich reservoir of biodiversity. Many species of turtles are found in the beel, some of which were endangered species, according to the local people. However, the species are gradually extinct from the beel due to various factors mainly

due to anthropogenic activities. Originally the beel covered more than 50 bighas of area. During the present visit by this author in the month of may 2022, It was observed that the beel has not more than 25 bighas of area at present which is also in a pathetic condition. This lessening of the beel area may be due to - The devastating flood during the year 1996 & 2012. During that flood, silting of sands caused reduction of the beel diameter and also reduces the depth. Other major causes of depletion of the beel are excessive fishing, use of chemical fertilizers and pesticides in nearby paddy fields. Since the nearby water bodies including the paddy fields, the water can flow to the beel and deposited in the beel, the water is contaminated. Excess growth of water hyacinth in the beel causes oxygen deficiency in the water which affects the ecosystem of the beel and causes death of the flora and fauna of the beel. It is to be mentioned that the water from nearby Charikaria river to the Jorkata beel causes reduction of depth of the beel. It is need of the hour to take necessary measures to protect the Jorkata beel from extinction. Some long term measures should be taken which includes- digging of the beel to increase the depth so that water may available throughout the year. Preventive measure should be taken so that no pesticides/ fertilizer contaminated water can enter the beel. This may achieved by construction of embankment around the beel. Removal of water hyacinth time to time is needed. Proper implementation of the above measures is the only way to protect the Jorkata beel and its rich biodiversity.

New species of Macaque discovered in Arunachal Pradesh, India

Jagadish Dutta
6th Semester

Scientist form Zoological Survey of India (ZSI) and University of Calcutta have discovered a cryptic new species om macaque in the forest of the Indian state of Arunachal Pradesh. The newly-identified species, scientifically named as *Macaca selai.* Macaques are geographically widely dispersed and species-rich genus of old world monkeys in the family cercopithecidae. There are more than 20 species of macaca ranging from Morocco and

Gibraltar in the west to Japan, Taiwan, Phillipines, Bali and Sulawesi in the east. Macaques are characterized by moderately long snouts, high-crowned molar teeth, very low cusps and long third molars. They are fruit-eaters. These primates has a pale face and brown coat colour and likely evolved from the Arunachal macaque (*Macaca munzala*), an endangered and recently discovered species from the same region of Arunachal Pradesh.

New Dinosaur Species Identified in Japan **Sangita Saikia**
6th Semester

A new genus and species of therizinosaurid dinosaur that lived during the Cretaceous period has been identified from the fossilized remains unearthed on Hokkaido, the northern island of Japan. Dubbed *Paralitherizinosaurus japonicus*, the newly-discovered dinosaur roamed our planet during the Upper Cretaceous epoch, some 72 million years ago.

The ancient beast belonged to Therizinosauridae, a family of small to large, mainly herbivorous, theropod dinosaurs. The Late Cretaceous therizinosaurs have been discovered from the Gobi Desert (Inner Mongolia of China and southern Mongolia) except for *Nanshiungosaurus* (Guangdong Province in the south-eastern China along the Pacific). *Paralitherizinosaurus japonicus* is the third therizinosaur specimen from Japan, following a single tooth from Honshu Island and a partial braincase, teeth, and humerus from Kyushu Island. The species is also the youngest therizinosaur from Japan and the first recovered from the marine deposits in Asia (Source: sci-news.com).

Meghalaya's Root Bridges: UNESCO's Tentative Heritage Site

India's famous living bridges – the roots of trees coaxed and stretched into the form of a suspension bridge over a river – have been submitted to UNESCO's tentative list for the coveted world heritage site status. The mountainous state of Meghalaya in the north-east has more than 100 such bridges in 70 villages, unique structures created by a combination of nature and human ingenuity. Once a bamboo structure has been stretched across the river, the roots of the tree, usually the rubber tree (*Ficus elastica*), are teased and manipulated to become entwined with the

bamboo until it becomes a strong mesh. The roots are allowed to grow gradually and strengthen over time. In the initial stages, only about 15-20 people can cross the bridge in a day. Much later, it can be as many as 50 or more, although it can take up to two decades for a living roots bridge to be finished. In a remote region such as Meghalaya, known as the "Abode of Clouds" and home to the "wettest place on earth" in Cherrapunji, building roads is not feasible. The topography is dense jungle dotted with waterfalls, steep slopes, lakes and streams. The living root bridges are the only way people in a village can cross a river to reach the other side to farm, sell produce, reach a doctor or send children to school. During general elections, officials on horseback carrying ballot boxes to remote villages have no other means of reaching voters but these natural bridges. Known locally as *Jingkieng Jri*, some bridges are double-deckers. Some are high above a valley, while others are just a few metres above the surface of a river. A description on the UNESCO website says: "Grown by indigenous Khasi tribal Communities, these structural ecosystems have performed in extreme climatic conditions for centuries, and encapsulate a profound harmony between humans and nature; validating the resilience of an ancient culture, where collective cooperation and reciprocity were the fundamental building blocks of life".(Source: theguardian.com, 1st April, 2022)

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