

TANGENTS

BY IHTISHAM KABIR



Wings of a Jungle Myna.

PHOTO: IHTISHAM KABIR

Love and Flying Dinosaurs

In Solnhofen, Germany, there is a stone quarry that has supplied limestone for centuries. This stone had many uses: for example, Romans had paved roads and constructed buildings with it. In the 1700s, a new market for limestone emerged when lithography – an image-making technique – became popular. Limestone used in making lithographs had to be free of blemishes. Otherwise, the resulting images were imperfect. Solnhofen's limestone was now inspected for cosmetic blemishes.

As the limestone was examined closely, many types of fossils were found in them. A stone with fossils was useless for lithography but useful for scientific collections. Most of these fossils were well-known, but in 1861, the fossilized skeleton of an unknown creature was found. It had feathers and wings for flight! This was the first evidence of a flying dinosaur. But the Archaeopteryx – as it was named – also had some characteristics of reptiles including a long bony tail.

This discovery strongly hinted that birds had evolved from dinosaurs. But what was the path followed during this evolution? The link between the older, larger dinosaurs and the Archaeopteryx was unclear.

Then, in 1962, the scientist John Ostrom found another important fossil in the American West. Three and a half feet tall, it was like other dinosaurs with one exception: one claw in its foot was clearly designed to cut and slash. So this beast was a swift killer, not a lumbering gentle giant. Ostrom named it Deinonychus (terrible claw.) Studying its anatomy further – including its long tail and sharp teeth – Ostrom found similarities to ground birds such as emus and cassowaries. This class of dinosaurs was named theropods.

Ostrom then went on to study Archaeopteryx fossils and made a startling discovery. He found many similarities between Deinonychus and Archaeopteryx. For example, the wrists of both had bones useful for up and down movements of wings. He argued that the carnivorous Deinonychus was

a predecessor of the flying Archaeopteryx.

(Incidentally, before making *Jurassic Park*, Michael Crichton spoke with Ostrom. The movie featured a predatory dinosaur modelled after Deinonychus, but since it is a difficult name, they decided to call it Velociraptor.)

Many scientists today think that birds descended from theropods such as Deinonychus by way of the Archaeopteryx. But mysteries remain. How did they become flight feathers? How did wings evolve?

The role of feathers is pivotal. A bird's flight feathers are incredibly sophisticated – much more so than airplane wings which exploit the same physical principles. To withstand the force of oncoming air, flight feathers are asymmetrical with a thin and stiff leading edge. The network created by the threadlike barbs in the feather makes it strong yet light.

There are several theories about how feathers came about. They may have evolved from scales of reptiles such as crocodiles. Another theory hints at love: feathers evolved to be seen. A recently unearthed dinosaur called the Anchiornis had way too many colourful feathers for practical purposes such as running and chasing, so it is conjectured they were for amorous purposes. Those feathers helped it find a mate, like many birds today that seasonally change to breeding plumage.

Another key question dinosaur to bird evolution: was it bottom-up or top-down? Some scientists argue that birds evolved from feathered dinosaurs that flapped their feathered arms as they ran, evolving into flight. Others think that feathered dinosaurs leaped from treetops and glided, evolving into flying creatures using their feathers. It seems that every time we learn something new about this topic, new questions are also raised. And so we find that nature does not easily give up her secrets.

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Two workers die from electrocution

OUR CORRESPONDENT, Thakurgaon

Two construction workers died after being electrocuted in Ruhea Madhupur village in Thakurgaon Sadar yesterday.

The deceased were Naba Kumar Barman, 26, of Modhupur village, and Subrata Kumar Barman, 28, of Rajagaon Ajroypur village in the upazila.

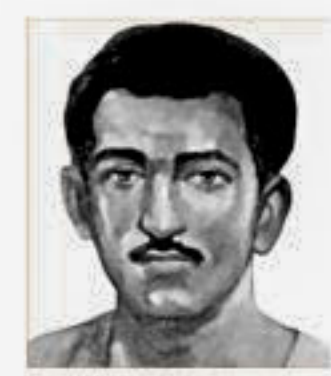
Officer-in-Charge of Ruhea Police Station Khan Mohammad Shahrier said the two with others were carrying out casting work of the roof of a house.

Naba got electrocuted first as he came in contact with a live electric wire on the tin-roof of an adjoining house while he was climbing down through it. As Subrata came to his rescue, he also got electrocuted.

They died while they were being taken to a hospital by fellow workers, the OC said.

Hamidur's 45th anniversary of death observed

OUR CORRESPONDENT, Moulvibazar



The 45th death anniversary of Bir Shrestha Hamidur Rahman

was observed in Moulvibazar yesterday. On the occasion, different socio-cultural and political organisations, and local administration chalked out elaborate programmes. Kamalganj Upazila Nirbahi Officer, upazila unit of Awami League, Border Guard Bangladesh, and local Muktiyoddha Sangsad placed wreaths at his memorial at Kamalganj. A doa mahfil and Qurankhwani will be held on the memorial premises.

He embraced martyrdom while fighting the Pakistani occupation forces at Dhali frontier in Sreemongal in Sylhet on October 28, 1971. Hamidur Rahman was born in 1945 at Khordakhalishpur village in Moheshpur upazila, Jhenidah.

Gugalicherra dying for being leased as wetland

District administration calls it a 'stagnant water body' in documents for leasing; greens want action to save it

MINTU DESHWARA, Moulvibazar

Since his childhood Morom Ahmed, 65, had known Gugalicherra as a river, but last year, much to his astonishment, he heard that the river was classified as a stagnant water body and leased out for fish farming.

"In our childhood we saw Gugalicherra as a flowing river," he told this correspondent when he visited the riverside yesterday to see how fish farming was going on in the river.

According to law, a river cannot be rented or leased out. So the Moulvibazar district administration changed the class of Gugalicherra in documents and labelled it as a "stagnant water body" to make it legally eligible for leasing.

This illegal practice, also seen elsewhere in the country, slowly sends the rivers to their death because the lessee usually constructs barricades in the river channel to farm fish, hampering the natural flow, and uses fertilisers for the purpose, damaging the water quality.

With the call to prevent Gugalicherra from dying out, Bangladesh Poribesh Andolon (Bapa) and Water Keeper Bangladesh organised a protest rally in Juri Upazila yesterday.

Abdul Karim Kim, general secretary of Bapa's Sylhet unit, said corrupt administrations changed the class of a river so as to lease it out to local political leaders for fish farming in many places in Bangladesh. Gugalicherra was leased early last year, he added.

Local fishermen also protested the leasing because they cannot fish there – a river becomes a private property when classified as a "stagnant water body".

Gugalicherra originates in India's Assam state and flows to Hakaluki Haor through Kulaura and Juri upazilas.

The lessee, Akddish Ali, president of Pubali Matsyajibi Samity, said, "I leased in Gugalicherra from the government. Last year, we could not catch fish. Local people prevented us from fishing this year as well."

Expressing his frustration, he said, "I'm financially hurt. I have submitted a

written complaint to the deputy commissioner (DC) against local fishermen."

Juri Upazila Parishad Chairman Gulshan Ara Chowdhury said she knew about Akddish Ali leasing the river and raised the issue in different meetings.

This case is a unique example of "administrative corruption" in Bangladesh, said Sharif Jamil, coordinator of Water Keeper Bangladesh. "It shows how corrupt officials make money by making illegal things legal on paper."

He said legal action should be taken against the district administration. "How can it be a reflection of the government's will to protect our rivers?"

The chief guest at the rally, Sharmin Murshed, member of the National River Commission, demanded immediate steps to salvage Gugalicherra.

Moulvibazar Deputy Commissioner Tofael Islam said he was transferred to the district only a few days back, hence unable to talk about the leasing without seeing documents.



A threatened Gugalicherra River in Moulvibazar's Juri upazila, yesterday. The river was illegally leased out for private fish farming by the district administration last year, paving the way for its slow death. To bypass law, the administration classified the river as a "stagnant water body" to make it legally eligible for leasing.

PHOTO: MINTU DESHWARA

Villagers start repairing road

OUR CORRESPONDENT, Tangail

People of different villages under Durgapur union in Kalihati upazila have started repairing flood-damaged portion of an earthen road on their own.

Over 100 people started the repairing work of the 100-feet battered portion of the road in Char Durgapur area from Potol to Bhairabbari on Thursday.

Many suffered due to the road's condition, said locals, adding, the recent flood also created a 30-feet ditch.



Hailing the initiative, Kalihati Upazila Parishad Chairman Mozaherul Islam Thandu said, "The earth filling will finish within five days, we will then repair the

road permanently." UNO Abu Nasar Uddin, engineer Azizul Haque and Durgapur Union Parishad Chairman SM Anwar Hossain also visited the spot.



Training

The Newspaper Owners' Association of Bangladesh (Noab) will hold a training session on VAT. Venue: The Daily Star Centre, Time: 9:00am.

Discussion

The Daily Star and others will hold a discussion on "Role of Renewable Energy and Energy Efficiency for Future Energy Security in Bangladesh." Venue: The Daily Star Centre, Time: 10:00am.

Lecture

Asiatic Society of Bangladesh will hold a memorial lecture on Tajuddin Ahmed. Venue: Asiatic Society of Bangladesh, Time: 4:30pm.

Discussion

Prothom Alo and others will hold a discussion on Urban Planning. Venue: Prothom Alo, Time: 10:30am.


People including some foreigners under the banner of National Garment Workers Federation bring out a procession in the capital's Jatiya Press Club yesterday, demanding workers' wage hike.



28th October, 2016

PHOTOS: STAR

Department of Public Administration



University of Dhaka
Admission Announcement
First Batch, Spring-2017

Executive Master of Public Administration (EMPA)

Program Features: The 16 month long program is designed to provide conceptual clarity, analytical skills and academic knowledge to effectively address strategic and practical challenges in governance and administration in Bangladesh. The executive MPA blends public administration theories with cutting edge field level practice; especially the long experience of Bangladeshi bureaucrats on what works in what conditions in ensuring effective governance for development.

The program offers:

- Core courses introducing contemporary national and international concepts on administration and governance of public and private sectors
- Several concentrations and specializations of elective courses including climate change and disaster management; public infrastructure project management; human resource management and; project evaluation.
- Regular workshops, seminars and field visits
- Weekend classes
- Internship assistance

Admission Requirements: Applications are invited from candidates holding a Bachelor's degree in any discipline with at least a second Class/Division (or CGPA 2.5 or above) in their academic careers and two years of work experience.

Application Period: 30th October, 2016- 20 November, 2016.
Admission Test (written): 3 December, 2016.
Viva-voce: 10 December, 2016.
Announcement of admission test results: 15 December, 2016.
Student enrolment deadline: 30 December, 2016.
Classes start: January 14, 2017

Admission Procedure:
Application forms to be collected from and submitted to the Office of the Department of Public Administration on working days between 10 am and 4.30 pm and weekend between 10 am and 12.30 pm at a cost of Tk. 1000/-. The Admission test is designed to evaluate candidate's qualitative aptitude, English language proficiency and analytical ability. For more information about the course and the admission test format contact office of the Department of Public Administration, Arts Building, 3rd floor, Phone 9661920 ext. 6661,6662 Cell: Mr. Abdul Haque 01925769568, Dr. Ferdous Jahan 01714133008, Dr. Mobasser Monem 01720021095.

Executive MPA Program Management:
Professor Dr. Salahuddin M. Aminuzzaman, Program Adviser
Professor Dr. Akhter Hussain, Chair, Department of Public Administration
Professor Dr. Mobasser Monem, Program Director
Professor Dr. Ferdous Jahan, Program Coordinator