

WORLD MIGRATORY BIRD DAY Birds, people and ecosystem

We should consider the consequences of our actions on migratory birds. Thinking about the importance of migratory birds for us culturally, economically and environmentally can help us feel that we have many genuine reasons to protect them.

SOURAV MAHMUD

Avian migration is a natural process, whereby different birds fly over distances of hundreds and thousands of km. in order to find the best ecological conditions and habitats for feeding, breeding and raising their young. When the conditions at breeding sites become unfavorable due to low temperatures, migratory birds fly to regions where conditions are better. The variation in migration behaviour is extremely large and contributes to fascinating diversity of birds in the world. Some birds migrate only a short way, while others can cover vast distances to wintering areas and travel between the northern and southern hemispheres. Some species move on broad fronts while others follow very narrow routes. Sudden and irregular movements of large numbers of birds can occur in several northern species in response to food shortages.

Humans have always been fascinated and inspired by the phenomenon of bird migration. A dove, with an olive branch in its beak, returned to Noah's ark to announce the end of the deadly flood. The dove has remained a symbol of peace and hope.

World Migratory Bird Day (WMBD) has a global outreach and is an effective tool for the international community to help raise awareness on the threats faced by migratory birds, their ecological importance, and the need for international cooperation to their

conservation. This year's theme for WMBD is "Migratory birds and people together through time". This year on the 12th and 13th May the world celebrates the Migratory Bird Day. This special day was initiated in 2006 and raises awareness on the need to protect migratory birds and their habitats. On the second weekend of May each year people around the world take action and organise public events such as bird festivals, education programmes and bird watching excursions etc.

In 2011 WMBD was absolute record breaker thanks to an amazing 205 registered events in 64 countries worldwide. It was celebrated on 14th and 15th May 2011 and focused on conversion of natural areas into agricultural land, construction of buildings, roads and dams, or deforestation, which are just some examples for the human use of land, while migratory bird populations are particularly sensitive to these changes. WMBD activities take place in many different places; schools, parks, town halls, education centers and nature reserves are all places where events were hosted in the past. These can vary from bird watching tours and educational workshops to dramas, festivals, exhibitions, painting competitions and other awareness raising activities.

World Migratory Bird Day 2012 celebrates the continuing relationship between migratory birds and people. The relationship between birds and people has always been a special one,

and the closer one looks at these valuable associations, the greater these connections seem to become. Throughout time and across cultures humans have relied on birds, be it to supply food, to deliver messages, or to serve as symbols of power and prestige. Migratory birds -- and the incredible annual journeys they take -- have always been a particular inspiration to people around the world.

Migratory birds are excellent indicators of the state of our environment. Like many other species, their migration patterns match their needs regarding the availability of resting, breeding and feeding sites. They eat insects and rodents which saves farmers money they would otherwise spend on pesticides and crop protection measures. By acting as natural controls, birds help regulate pests by reducing populations of potentially harmful insects such as caterpillars, weevils, cutworms, beetles and flies. We know ecological scavenging services provided by vultures cannot be underestimated, and they also play a critical role in nutrient cycling. Being highly specialized to rapidly dispose of large carcasses, vultures act as health wardens in the avian animal kingdom. Scientists are studying the impact of the continuous decline of vultures from West Africa to Southeast Asia and Bangladesh.

Considering the cultural, social, historic, economic and spiritual connections we have with birds, it becomes clear that migratory birds and people are inseparably connected in many different ways and on many different levels. Migratory birds can be found almost everywhere on the planet, so virtually wherever you go, birds will be there too. Some people may have more affection and a deeper bond with birds than others. In many cultures, the movement, appearance or disappearance of migratory birds are an indication of seasonal change. For example, in Europe migratory birds are the "spring bringers" because their return to Europe corresponds to the return of spring as well.

Migratory birds perform important ecological regulating services. They have a vital role in seed dispersion and flower pollination. For example, Grassland birds rely on grasses as their nesting habitat and help to maintain their preferred ecosystems, which are in turn considered highly valuable as a wildlife refuge. By dispersing grassland seeds, these birds act as gardeners of these ecosystems. Costal birds can also produce guano, a substance considered as one of nature's best fertilizers. In the Quechan language, guano means "the droppings of sea birds". Resulting from a complex process that starts with living plants that are eaten by insects, which are then consumed by fish that are finally digested by birds,



guano is deposited on the floors of caves, rocks or ground in large quantities around bird colonies.

Quechans treated guano as a valuable material by restricting access to it and punishing any disturbance to the birds with death. The United States also recognized the value of guano by passing an Act in 1856 that gave protection to any citizen that discovered a source of guano. Characteristics of guano provide for improving the texture of the soil, clearing toxins and speeding up decomposition. During the winter a million of waterfowl gather in Haors of northeast Bangladesh and storage guano which would help to improve our soil fertility and be used as fish feed.

Bird watching is a highly popular recreational activity and greatly contributes to the growing global ecotourism, a billion dollar industry, which again makes migratory birds economically important for human beings. Hundreds of thousands of birdwatchers travel to various places in the world hoping to glimpse rare species. Considerable economic benefit is achieved from their disbursing of funds for travelling, accommodation and entrance fees. This type of ecotourism educates people about the importance of migratory birds and ecosystems. Ecotourism can help conserve important habitats that help preserve not just migrating birds but biodiversity on a much greater scale. Recently the young generation of Bangladesh concentrated on birding and bird research.

Bird ringing which involves the marking of individual birds is a rich

source of scientific information providing vital data on a large spatial scale including migration patterns, demography, ecological processes and environmental changes. Any record of a ringed bird, either through recapture and subsequent release, or on the occasion of its final recovery as a dead bird, will tell us much about its life. This technique is one of the most effective methods to study the biology, ecology, behaviour, movement, breeding productivity and population demography of birds. Bangladesh Bird Club already completed some bird ringing programme in Haor areas.

Bangladesh is a land of a good number of fascinating migratory birds. A total of 176 species of birds are regular migratory species to Bangladesh; 160 of which are winter visitors, six are summer visitors and 10 are spring or passenger migratory (Encyclopedia of Flora and Fauna: BIRDS, 2008). The haors, costal islands, major river, charlands are the important habitats of migratory birds. But human intervention, habitat loss, mono culture, poaching, hunting, climate change, deforestation, wetland degradation, industrial pollution, insecticide etc. are the greatest threats to migratory birds because these are linked with their habitats which consequently causes the declining populations and extinctions of migratory birds.

Migratory birds are a good indicator of how humans interact with and use the natural environments around them. Migrating birds act as indicators of biodiversity, ecosystem health and climate change. Migratory birds also provide essential ecological benefits

and services, such as pollination, to the ecosystems we rely on to survive. Human beings are the greatest threat to migratory birds; man-made objects and structures such as buildings, power lines and wind turbines, are often barriers to their movement and make their journeys much more dangerous.

Many migratory bird species are threatened by unsustainable hunting and poaching in many parts of the world, especially in Africa, South America and Central and South Asia. Many human activities including excessive land use, pollution as well as impacts of climate change now gravely threaten migratory bird populations around the world. Migratory birds are especially vulnerable because they rely on a number of habitats; not only their migration destinations but also the sites they stop at during their journeys.

Many bird species migrate in order to survive. Migration is a perilous journey and involves a wide range of threats. However, only a small number of birds are actually threatened by natural events. The loss of habitats due to pollution or exploitation caused by encroachment for settlement, agriculture, grazing etc. is the main threat the migrating birds face.

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Indian Pitta, a regular summer visitor to Bangladesh

PHOTO: SOURAV MAHMUD

Guest birds avert sanctuary?

Migratory birds used to stay and breed mainly on two lakes situated on the campus. These were declared sanctuary for birds in 2005.

PROBIR KUMAR SARKER

The number of guest birds coming every year to Jahangirnagar University (JU) lakes since the eighties has been falling for the last few years in such a way that last year there was no "bird fair" held as part of the campus's recent trend.

Observers say it happened mainly due to aquaculture or fish farming in the lakes, human invasion or poaching, new establishments near the waterbodies and noise pollution.

A few years ago, thousands of foreign birds of around 20-30 species and several of the local birds used to start flocking at JU in August-September and leave in March-April. But things have changed of late, as they have started to find alternatives to the Green JU obviously because of public interference of their inhabiting and breeding areas, and lack of food including aqua vegetation and insects in the waters.

Because of the number of birds staying on the campus it experienced more and more people coming to enjoy the birds' beauty.

Experiencing the popularity, zoology department and environmentalists jointly in 2003 launched a bird fair when bird watching with binoculars and telescopes, art and quiz competition for school students, discussions, photography exhibitions used to take place.

But, last year, there were no birds and therefore, no festivity.

mainly on two lakes situated near and behind the registrar building. These were declared sanctuary for birds in 2005 and aquaculture was banned to ensure safe-haven for the migratory birds. The administration too gave its earnest attention to the tourism aspect of the issue, and gradually developed the lakeside, walkway and put sitting arrangements on the banks.

Barbed fences were also erected and information stickers posted around the lake to prevent people from going close to the birds that makes the birds fly away.

Fish farming, however, has not been prevented at the other seven lakes and ponds; those are leased for commercial farming over three-year contracts. Mostly the staff and the teachers are the lessee. The administration last year also leased a 14-acre area, which was rich in medicinal plants and birds and butterflies, for producing turmeric.

When there were no birds seen last winter, students, teachers and journalists blamed the present administration for their frustration, saying that indiscriminate fish farming in the lakes had driven the birds away. They claim that the time when lime was used in the lakes for routine cleaning was wrong. Moreover, removal of the lotus and lily beds, water hyacinths and other green vegetation was another major reason behind the lakes being bird-forsaken.

The administration since has been facing serious criticism on the campus and in media for such unfriendly behaviour against ecology and biodiversity.

Lime is used before releasing baby fish to prepare the water body as favourable for their growth.

As approached by the writer to find the concrete reason behind the upset, the authorities denied that they were wrong in putting lime last year that could hinder the birds from coming to the campus.

"We used lime as usual last April or May. Fisheries officials from Savar came and administered the process and quantum of baby fish was released there," defends Deputy Registrar (estate) ABM Azizur Rahman, who is also a member of the campus's internal resources committee.

That was not commercial farming. The administration usually releases some baby fish this way and brings them up for selling after two or three years, he said.

Prof Abdus Salam, another member of the committee and teacher at zoology department, could not confirm any major reason behind the migratory birds' not coming last winter. He argues that the number of birds from the cold regions this time was low not only at JU but also at different parts of the country.

He cited similar fall in number of migratory birds in Dinajpur, Nilphamari and Chittagong, but confirmed that the serene haors of Sirajganj and Sunamganj had experienced thousands of guest birds.

According to his observation, the lakes were getting unfavourable for any water species to live. That is why, those needed to be refurbished as their beds turned pollution affected and too muddy. "We had to neutralise the water with lime after the birds were gone," he said.

The lakes are generally cleaned after the birds leave in March-April. But another zoology department teacher

contradicted the administration, claiming that lime was used in December 2011, which was the major reason behind the upset.

According to Prof. Monwar Hossain Tuhin, also known as a butterfly expert, a possible weather change in the cold regions and thus availability of foods for the birds in winter "may be the reason why the number of birds has been falling for the last few years."

Weather in the cold regions might be getting warmer, and thus those birds got favourable condition to cope with and find foods, he says.

"But the birds which came in November-December 2011 found an unfavourable situation as the lakes

were too clean for them with lime and increased toxicity, he observes.

Most of the migratory birds use leaves of aqua plants floating on water as breeding cover and find the vegetation and small fishes as foods. They also like to camouflage with the help of those leaves sensing presence of adversaries, he adds.

The administration should be more careful in dealing with the dynamic biodiversity of this campus, Prof Monwar suggests.

Early February last year, the birds' festival took place for the last time. VC Shariff Enamul Kabir inaugurating the fair said a safe zone for birds must be

there on the campus. "The number of birds in Bangladesh is decreasing day by day. We need to do something immediately to preserve them," said the VC (The Daily Star, February 5).

Prof Salam admits that had there been water hyacinths and lotus in the lakes last year, the birds might have come. The measurement of lime might not have been correct, he suspects.

With a view to ensuring the travel of guest birds to the campus in the upcoming winter, the administration in June will plant lotus in the lakes to increase vegetation, he assures.

The writer is a journalist.



The lake sans birds