

Rishad Naoroji



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Rishad Naoroji is a renowned raptor biologist and conservationist. He is the author of the book *Birds of Prey of the Indian Subcontinent*, which was published in 2008. In an interview with *Current Science*, he talks about the challenges of studying raptors and on the mass killing of the Amur falcons in Nagaland in 2012.

What triggered your interest in studying raptors and when did it all begin?

My interest in wildlife started at a very young age. My first trip to a National Park was when I was 4 years old. At that age my interest was not restricted to one particular taxa or group of species. On my 18th birthday, my father gifted me with a life membership to the Bombay Natural History Society (BNHS) where I frequently went to attend talks. But my interest in raptors began when I started to accompany scientists from BNHS on field trips. I was fascinated by them and began to read every bit of information I could get in the BNHS library. I later started to explore National Parks and other areas with scientists from BNHS, helping them capture birds to ring them.

How was this unusual interest received by your family and the research fraternity?

My family initially received my interest, unusual as you call it with some trepidation and so did some in the research fraternity. However, J. C. Daniels from BNHS was supportive and encouraged me.

Have you received any specialized training in raptor biology and conservation?

I have not received any specialized or formal training in raptor biology or conservation, but gained exhaustive knowledge on them from the literature and field observations. Associating with some of the BNHS projects, I began to design methodologies and data sheets for field surveys. BNHS received a large grant from the U.S. Fish and Wildlife Service to initiate conservation projects for raptors. Along with Vibhu Prakash (BNHS), I was chosen to show the funding team the potential sites we had selected for raptor research.

Compared to other species (both birds and mammals), studies on raptors in India are very few. Why is this? Is this trend global?

When I first started, studies on raptors were very few. Information available and the number of people interested in studying raptors were also limited. But a lot of interest was always there for raptors in

'A person interested in studying raptors must be ready to spend long periods of time in the field.'

the Western world; western Europe and USA. Today, however, studies on raptors are gaining popularity in India with many renowned research institutions and groups beginning to carry out research on them.

How different is studying raptors from other bird species? What are the challenges of studying raptors?

Studying raptors can be very challenging. They are mobile species and have large home ranges which make it hard to locate and follow them, especially in closed habitat areas like forests. Open areas such as deserts and grasslands provide high visibility and it is easier to follow and study them in such cases. I conduct raptor surveys in areas surrounding Jaisalmer and Bikaner in western

Rajasthan every winter and I am able to sight and follow raptors easily because of the visibility. Desert is also a very good place to observe raptors, as it supports high densities of many raptor species, both resident and wintering.

Home ranges of raptors, their migration and local movement patterns are difficult to determine, especially for the larger species as they have large home ranges unlike the smaller ones, which have smaller ranges and are easier to locate/identify. Also studying the diet composition of many raptor species is difficult as they consume a large variety of prey species ranging from rodents to small birds and in the case of some species even small deer fawns. On the other hand, understanding the breeding biology and breeding cycle is relatively easy and can be done by setting up a hide with a clear view of the nest. But 'a person interested in studying raptors must be ready to spend long periods of time in the field'.

What are the issues concerned with raptor conservation in India?

The biggest threat to raptors in our country is habitat destruction. Raptors are found in diverse habitat types from marshlands and wetlands, deserts and grasslands and even dense forest areas. Draining of water bodies and marshes and their conversion for development are major threats faced by wetland species like the white-bellied sea eagle, Pallas's fish eagle, grey-headed fish eagle, osprey, marsh harrier, etc. which are water-dependent, especially for their prey. Similarly, the open desert and grassland habitats like the ones found in parts of Gujarat and Rajasthan, which are important for species like the Indian spotted eagle, red-headed falcon, white-eyed buzzard, migratory harriers, laggar, falcon, Saker falcons, long-legged buzzard and tawny eagle are being lost to agriculture. Agriculture is now taking over many parts of the desert and we may lose a large part of raptor habitat in the near future due to construction of canals and deep bore wells. The raptor species found in forest habitats too threatened by habitat fragmentation and degradation, which could result in smaller populations

that are widely separated geographically, making its long time survival and persistence difficult.

What motivated you to bring out the book 'Birds of Prey of the Indian Subcontinent'?

Most of the Forest Department staff were under the impression that conserving the tiger would alone help conserve other fauna and flora within our National Parks and hardly paid heed to conserving the raptors. Raptors are at the apex of their food chain and hence are good bio-indicators of habitat quality. The presence or absence of a raptor species in an area can therefore help in indicating the health of different habitats. For this, one needs to be well aware and informed about the habitat requirements of different raptor species. After having travelled all over the country, studying and observing raptors for over 20 years, I had gained sufficient knowledge on the bio-

geographic distribution, identification traits and habitat requirements of 69 species of birds of prey and wanted to make this information available to other people, especially the Forest Department officials. I also hoped that this book would help motivate raptor enthusiasts, whose numbers were increasing around the time it came out.

How many years of work have you invested in bringing out this book?

Collecting data on the 69 species of raptors by travelling the length and breadth of the subcontinent and collating them all together took nearly 15 years. When I was convinced that I had enough data to bring out a book, I started to work towards it by organizing all the information I had gathered under different chapters and sub-headings. Next, I started by putting my pen on paper writing sections on distribution, behaviour and conservation status, etc. of each species. As

the book progressed, it became easier to write and I was able to complete writing the account of one raptor species per day.

The presence of bush meat hunting in parts of North East India has been known for a long time now. In October 2012, it was discovered that the Amur falcons were being killed for consumption. Why has this incident come as a shock to wildlife conservationists?

Bush meat hunting is part of the culture of most communities in North East India. In areas like Nagaland and Meghalaya, it is difficult to find signs to confirm presence of mammals, except in a few isolated pristine forest patches. Birds too are rare as the people hunt and consume most wildlife, including snakes. The Amur falcon is a unique and enigmatic species and is known to have one of the longest migration routes among all raptors. It breeds in Russia (Amur) and China and migrates via the Indian subcontinent to its wintering grounds in South Africa. This migration is a phenomenal event with the Amur falcons covering approximately 22,000 km annually which is known to be one of the longest trans-oceanic flights over the Indian Ocean all the way from north Asia to the southern tip of Africa. I have seen Amur falcons in large numbers in Mongolia, but they also occur in Siberia and northeastern China in good numbers. They arrive in Nagaland in large flocks during the end of October and halt for 2–4 weeks, feeding on insects and building up their fat reserves to prepare themselves for the long flight ahead. A large congregation of Amur falcon from Doyang, Nagaland and subsequently similar congregations have been reported from other areas in the North East. Ramki Srinivasan, Bano Haralu and their team made us aware of the mass killing of the Amur falcons through their reports in the on-line portal 'Conservation India'. They discovered that the local people were trapping the birds in very large numbers and selling them in the local markets. In some cases they were also supplied to city markets in Kohima and Dimapur. The extent and scale at which the killings took place shocked conservationists. If such incidents continue to occur in the following years, it would definitely have a drastic impact on the demography of the Amur falcon.



Amur falcon

Photo: www.conservationindia.org



Amur falcon taken to be sold at the local market.

Photo: www.conservationindia.org

What do you believe to be an acceptable approach to ensure such horrific incidents do not repeat?

We need a sustained environmental conservation programme that is linked to income generation. The 2012 killing of Amur falcons was mostly done by the local fishermen who used their fishing nets to trap birds, as their fish catch during the period had drastically declined. Focus should be on improving the fish catch and access to better fishing equipment that will help improve the economic condition of the marginalized fishing community. Skill development to manage and maintain home stays all-year round and especially during the period of Amur falcon migration can be initiated, as I am sure many people would like to witness this spectacle.

In the West (developed economies), we find individuals and foundations supporting conservation science and research. Your views on what takes them to be philanthropic in conservation science and what in your opinion needs to be done in India for better environmental sustainability?

There is more awareness regarding environment among individuals in the developed economies in the West. For example, the amount of funds raised abroad for conservation of the tiger, an animal not found in their countries, is far

more than the amount generated in India, whose national animal is the tiger. An Aircel-NDTV 12 h programme organized in 2012 helped raise Rs 5.5 crore for tiger conservation in India. Considering that India is one of the fastest growing global economies, this amount is insignificant. In India, the priority and focus is on social issues like basic education and primary healthcare. Environment sustainability is largely neglected or does not find a place in corporate social responsibilities of many companies. Even ultra-high net worth individuals and companies are driven to philanthropy to help solve issues of social inequities rather than environment sustainability.

The developed economies in the West, however, do support conservation science and research in India. Though we have a few individuals and foundations within India, we need many more people/organizations coming forward to support and fund wildlife conservation and research projects. I have come across a few people, heading corporate companies showing interest in lending their support towards environmental sustainability and nature conservation.

Please share with our readers more information on the Raptor Research and Conservation Foundation that you are a part of.

Raptor Research and Conservation Foundation (RRCF) is a new organiza-

tion with focus on fostering and encouraging raptor studies in India. Very little is known about the raptor species found in the country and by setting up RRCF, we hope to fill the lacunae in the knowledge we have available on the raptor species.

The main aims of RRCF are:

1. Capacity building: To set up a core team of raptor scientists.
2. Develop and execute both long and short-term field projects.
3. Work in collaboration with raptor research centres and groups both in India and abroad.
4. To promote conservation of raptor habitats through sound and scientific research and advocacy with the different stakeholders like Government authorities, Forest Department authorities and local communities.

RRCF encourages wildlife biologists and researchers to carry out research and conservation activities on raptors by funding projects through its grants programme. Recently, RRCF supported conservation groups working towards protecting Amur falcons from being hunted by locals during their passage through Nagaland and will continue to support it in the future too.

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