3rd November 2007: excursion and Dutch owl-day celebrations

It is really unbelievable that an owl-day is celebrated here, considering the superstitions owls face around the globe. But those who participated were happy to see how the importance of owls is being highlighted in European countries.

We went on an excursion to the small island of Schiermonnikoog (Shirmanikov), in the Wadden Sea. Sighting nearly 60 species of birds in a single day of birding was very rewarding and a lifetime experience.

4th November 2007

Geoff *et al* presented the plenary on 'The population dynamics, dispersal and conservation of the Canadian Burrowing Owl *Athene cunicularia*'.

The day saw one more presentation by Arvind Ambudoss on 'Anthropocentric pressure induced decline in status and distribution of Eurasian Eagle-Owls and initiation of participatory conservation measures-a case study in Tamil Nadu, South India'. Motti Charter and others' presentation on 'Nest box use by Barn Owls in a biological pest control program in the Beit She'an Valley, Israel' seems really suitable for India. The team had convinced Israeli farmers regarding the utility of Barn Owls-now the farmers spend money to install nest boxes on their farms, thus helping increase the population of the owls.

Conclusion

The World Owl Conference was a great event towards research and conservation of the Owls. However the meagre representation from the Indian Subcontinent, with as many as 32 species of owls, was saddening. Only three species of owls were 'represented' by Reuven Yosef, Arvind Ambudoss and the authors, though there were more abstracts.

The conference discussed the causes of decline but stressed on research and conservation using the latest technological advances to help owls survive. Reintroduction, use of nest boxes, public participation, radio-telemetry-were buzzwords.

The conference resulted into a decision to form a World Owl Working Group.

—*Gleanings*—

Edelaar, P. 2008. Rediscovery of a second kind of crossbill for the Himalayan region, and the hypothesis that ecological opportunity drives crossbill diversification. ***Ibis*** 150: 405-408.

Crossbills are known for their remarkably curved bills that cross each other when closed. These unique bills are adapted to pry open tough scales of conifer cones. The bill size and depth of each kind of crossbill (whether a distinct species or a subspecies) has apparently evolved in response to natural selection for foraging efficiently on a particular size and shape of cone. Worldwide, there are more crossbill species in areas of more conifer diversity, leading to the hypothesis that crossbill diversity is spurred by the diversity of conifer species.

However, in the Himalaya, there is only one crossbill, the Himalayan Crossbill *Loxia curvirostra himalayensis* that occurs all the way from Himachal Pradesh (India) eastwards through southwest China-a range where at least 11 conifer species suitable for crossbills are found. Why is there only one crossbill species in an area of such high conifer diversity? Is the hypothesis that conifer diversity drives crossbill diversity wrong or inadequate? Or are there other crossbill varieties or species in the Himalaya that we are as yet unaware of?

Pim Edelaar, an animal ecologist from Uppsala University in Sweden, investigated this conundrum. He borrowed and examined 39 crossbill specimens from various bird museums in the USA. These birds had been collected within the known range of the Himalayan Crossbill. His results, which revealed striking bimodality in the data, show two clearly separated groups of crossbills, one distinctly smaller than the other in terms of bill depth, length of upper mandible, and tail length. Thus, he uncovered two kinds of crossbills in the Himalaya.

He calls this a 'rediscovery of a second kind of crossbill' because the larger ones were discerned as distinct enough to be named separately as *L. c. bangsi* by Griscom way back in 1937. However, in 1941, Stanford and Mayr lumped both large and small forms as *L. c. himalayensis*, apparently because Mayr felt that his measurements (of what he *believed* to be Griscom's specimens) did not agree with Griscom's published data. They also felt that the sample size for the comparisons was inadequate. Now, more than half a century later, Edelaar's findings have vindicated Griscom's opinion that the larger ones are distinct enough to be given a separate subspecies status. It is possible that Mayr used the wrong set of specimens.

Edelaar argues that the difference in bill depth between the two groups is 'more than enough for strong ecological differentiation' considering that bill depth in five distinct kinds of North American crossbills on average differs only by 0.10 to 0.61 mm, whereas here it differed by a whopping 1.07 mm. Also, based on a review of conifer distribution data, Edelaar hypothesizes that the larger crossbill maybe specialising on the cones of the Chinese Larch *Larix potaninii*, and the smaller one may be similarly adapted to feed from

the relatively smaller cones of the Himalayan Hemlock *Tsuga dumosa*. Since there is an overlap in the range of the two conifer species, Edelaar feels that there may be substantial geographical overlap in the two forms of crossbill as well. Edelaar writes that DNA and field studies in this region of overlap will be necessary to determine whether the two crossbills warrant elevation to distinct species, rather than just subspecies.

In a recent essay, I highlighted the importance of scientific collections of birds not just to describe new species, but also to 'spawn many unexpected and unanticipated surprises long after the specimens themselves are added to museum drawers…' (Kannan, R. 2007. *J. Bombay Nat. Hist. Soc.* 104: 12-18). This case bolsters that argument. Edelaar did not do any fieldwork for this clever exposé, and his work stemmed from a careful examination of museum specimens that were collected by museum ornithologists, years ago. In fact, the two crossbill forms may never have been told apart by mere field observations. Thanks to museum collections and his intelligent and meticulous work, we know of a new crossbill for the Himalaya.

– *Ragupathy Kannan*

Round, P. D. & G. A. Gale. 2008. Changes in status of *Lophura* Pheasants in Khao Yai National Park, Thailand: A response to warming climate? *Biotropica* 40: 225-230.

There is a preponderance of evidence that global warming has affected bird populations in various parts of the world, but much of this evidence is in temperate or polar zones. The fact that birds are now arriving and breeding earlier in spring in northern latitudes is well established. Similarly, pole-ward and altitudinal shifts in bird distributions too have been documented. But to my knowledge, only one major paper has clearly documented such changes in avifauna from the topics: Pounds et al. (*Nature* 398: 611-615) reported that low elevation species in Costa Rica are now increasingly found in montane cloud-forest habitats, and linked this phenomenon to decrease in frequency of mists in higher elevations induced by spikes in air temperatures.

Now, Philip Round and George Gale of Thailand report an analysis of a series of sight records spanning a quarter century of two syntopic species of pheasants, one lowland, and other montane or submontane, in Khao Yai National Park, Thailand. Their results are strikingly similar to that reported above from Costa Rica. The lowland species, Siamese Fireback *Lophura diardi*, is increasingly encountered at higher altitudes in relation to those of the higher elevation resident, the Silver Pheasant *Lophura nycthemera*. Unlike the Costa Rica study, however, the authors were unable to establish a direct cause-and-effect relationship between climate change and these shifts in altitudinal distributions, and hence hypothesize that the shifts could be a response to a warming climate.

What makes this study of especial interest is it illustrates the value of maintaining long-term bird records with meticulous notes on elevations and other pertinent information. The authors pored over sight records archived in three organizations from 1978 to present. They also appealed for sightings of the two pheasants in a posting on the Oriental Birding Newsgroup and were able to get additional information. To all this, they added their own sight records and systematic survey data that they themselves gathered. They then used simple linear regression models to correlate changes in pheasant encounter rates with changes in rainfall and temperature across time frames.

This study should be a model to illustrate how simple maintaining and archiving of bird records could spawn interesting studies years after the birdwatchers made those observations. Even amateur birders can contribute significantly to the scientific study of birds, simply by maintaining, and periodically archiving, their bird records.

– *Ragupathy Kannan*

—*In the news*—

Compiled by Praveen J.

Migration time for Amur Falcons

There has been a wave of Amur Falcon *Falco amurensis* sightings from different parts of India in the last month of November. This species is believed to be a passage migrant through the Indian Subcontinent and is seen along the western coast and eastern parts of the country during November. The first report for this season was by Sumit K. Sen from Kolkota on 23.x.2007 where he photographed a single bird from his home. Bill Harvey reported a tiercel from Sunderbans on 14.xi.2007. A sizable flock of 250–300 birds was reported on 19.ix.2007 near Mumbai by Adesh Shivkar. Later on 22.ix.2007, he saw two birds at Gawlideo Hills near Mumbai. Shashank Dalvi photographed a massive bazaar of 1,000+ Amur Falcons at Nameri National Park in Assam on 11.xi.2007. Vaibhav Deshmukh reported three birds at Ramdharneshwar Hills near Alibag (Maharashtra) on 19.ix.2007 and one bird on 25.xi.2007. Around Hyderabad, J. Pranay Rao saw a falcon on 3.xi.2007 near Medchal and eleven birds over a grassy path around Shamirpet on 24.xi.2007. Raju S and Rajasree photographed a falcon from Punchakkari, Thiruvananthapuram on 18.xi.2007. With more bird-watchers going out in the field, an increase in