Barcoding Indo-Malayan birds

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The All Birds Barcoding Initiative (ABBI) was announced on 9 February 2005 at the First International Barcode Conference held at the Natural History Museum (London). It is ABBI's aim to establish, by 2010, an archive of DNA barcodes that are linked to museum specimens for all (~10,000) bird species (http://www.barcodingbirds.org). The DNA archive will include the gene sequence records from mitochondrial gene COI, supplemented with sequences from other loci when needed (http://barcoding.si.edu/PDF/ABBI_Workshop_Report_14dec2005.pdf). The inaugural workshop of ABBI was held at the Museum of Comparative Zoology (Harvard University) from 7 to 9 September 2005. Forty-eight participants from 23 countries attended this workshop. It was decided at this workshop that barcoding approximately 2,500 bird species of Indo-Malayan region should be a top priority. The reasons for this priority are this region's high species endemism and endangerment, and relatively poor past and current ornithological research effort (see Sodhi et al. 2006). New bird species are still being discovered from Indo-Malaya (*e.g.* Rappole et al. 2005) therefore, a regional ornithological initiative such as ABBI is likely to yield remarkable discoveries.

Twenty-six participants from nine countries convened in Singapore from 8 to 9 March 2007 to discuss how best to proceed with the barcoding of Indo-Malayan birds. While there were concerns about the overall scientific value of a project based primarily on single genetic locus, participants generally felt that a barcoding project in the region would strengthen the network of ornithologists and promote research on birds. Protracted permit processes, local bureaucratic hassles, paucity of funding and lack of facilities and infrastructure were identified as potential stumbling blocks to progress. However, many countries reported on a variety of successful advances in specimen collection and sequencing progress. Luan Keng Wang from Singapore, for

example, reported on a successful program in which accidentally killed birds from a variety of sources and localities are "salvaged" and made into museum specimens with tissue samples. Perhaps most inspiring was the presentation by Sri Lankan representatives Sarath Kotagama, Neil Fernandopulle, and Rohan Pethiyagoda (in absentia). They have persuaded local officials to allow collection of tissues for DNA barcoding and other molecular work. While exporting biological samples from Sri Lanka remains problematic, this difficulty will be avoided by taking advantage of the considerable laboratory resources within the country. Genetech in Colombo will be responsible for laboratory aspects of bird barcoding in Sri Lanka. By keeping the various steps of the barcoding process within the country, Sri Lanka provides a model as to how efforts by local scientists can surmount hurdles to barcoding progress discussed at the meeting's outset. The Sri Lankan Bird Barcoding project, if successful, can provide the guiding light for similar endeavours in other Indo-Malayan countries.

With this document, we welcome ornithologists working in the Indo-Malayan region to give their feedback on and hopefully participate in this initiative. Ornithologists working in Bangladesh, Brunei Darussalam, Cambodia, Laos, Myanmar and Timor-Leste are particularly encouraged to contact us. Efforts are now underway to identity potential funding sources for the Indo-Malayan ABBI Initiative and, in particular, the Sri Lankan component that is poised to proceed.

References

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