

# Biodiversity Information Sharing Service (BISS)

► By **ALOYSIUS J.F.M. DEKKER**

**B**iological diversity covers a vast subject matter and it is not surprising that the amount of information about it is truly huge. What is surprising however, is the very little information readily available to those who need it most: law and decision-makers affecting biodiversity, managers of biological resources, non-government organizations and professional scientists. Most data are scattered in private collections and scientific institutions, and often deal with highly specialized issues and are described in scientific terms. There have been few attempts to collate different data, but often these are not readily available to the general public. So far, none exists for the ASEAN region.

It is this hiatus that the ASEAN Regional Centre for Biodiversity Conservation (ARCBC) tries to fill in with its Biodiversity Information Sharing Service (BISS).

While it is easy to talk about biodiversity in general, most people fall silent when it comes to presenting hard facts. Experts and specialists know a lot in their own fields, but there are pieces of the puzzle that nobody has been able to meaningfully present holistic perspective..

This is what BISS tries to do: put all the pieces together to produce information at a depth and in a format of salient points that anybody, scientists and the general public alike, can understand and work with. This is a mammoth task and it would be foolish to try and obtain all the data by ourselves. Instead, BISS would keep only a minimal dataset itself for critical details, like species name lists and protected area network data. The bulk of the data would

come from direct links into other sources: national databanks in ASEAN countries, international databanks like World Conservation Monitoring Centre (WCMC), museums and herbariums, and private collections. This would enable BISS to focus on the relevant details while still providing access to details when required. ARCBC will assist anybody in the region in making their biodiversity data readily available through the system.

For this reason, ARCBC is particularly keen on contacting persons or organizations willing to share descriptive sheets on species especially lesser known taxa; photographs and locality data of species; descriptions of sites; species lists by site and digital land-cover maps for the ASEAN region. ARCBC will ensure that data presented through such

links are fully acknowledged and that copyright to illustrations, photos, maps or other data would be retained by the rights' holder.

For the current system, ARCBC has basic data on the protected area network in the ASEAN region, and it is trying to install national databanks in each ASEAN country (except Myanmar) that would store and update country-specific data sets.

On a much larger scale, ARCBC is busy compiling ASEAN species' lists for different taxa. At present, the lists of Mammals (939 species), Birds (2,700 species), Amphibia (730 species) are already on the web with their distribution, habitat details and categories under the International Union for the Conservation of Nature (IUCN). A list of Reptiles (1,244 species) would be online within one month; work is progressing on each



list of plants (over 30,000 species currently listed), butterflies (approximately 1800 species so far listed), Philippine Odonata (305 species) and Philippine fungi. BISS links descriptions and pictures to species. Currently, descriptions of 2,500 vertebrates and about 1000 plants are online and pictures of about 2000 species are already on the web server.

BISS has a user-friendly species search engine that provides basic conservation status, distributional and habitat use information and can link to other web sites providing additional information on a particular species. Thus for all mammals, there is a link to the Smithsonian Website in Washington, U.S.A. to check on the taxonomic status of each name; this has further links to specimens held in the US National Museum. Amphibia has links to the Chicago Field Museum, and reptiles with the Heidelberg database. For plants, a useful link is being developed with the Leiden Herbarium in Netherlands. Some 40,000 type specimens held in Leiden can be viewed in high detail over the web. For all threatened birds, there

is a link that allows one to view or download the species descriptions from BirdLife International's new and online version of the 'Threatened Birds of Asia' book.

Point data for locality of species can be viewed by calling up the Xerox mapping routine held on its website. Links are also provided to other well-developed web-based databases, such as those for fish (Fishbase) and coral reefs (Reefbase), which ARCBC does not have to replicate but can facilitate access through its own site.

Selecting the locality-wise search under BISS allows the visitor to examine a range of maps such as biogeographic regions, vegetation, endemic bird areas, important bird areas, protected areas and other priority sites. By clicking on the maps, one can select a site and call up relevant data. Basic data available include descriptions, lists of associated species, photos and habitat data. Again links to other data holders allow the browser access to additional data such as those catalogued by the WCMC. Philippine Protected Areas

may be browsed in each protected area's specific website on the Government's web server. Vietnam Protected Areas allows viewing or downloading sheets of the Vietnam Protected Areas Sourcebook, and for Indonesia there are links to the BioMap programme. Where interesting species are mentioned or listed under sites or regions, these references are made into hot links so users can quickly check out related data.

Although BISS is still being developed, new modules are currently under construction to allow direct downloading of datasets, maps and other resources, such as a habitat-based search engine and inter-linkages with bibliographies and specimen holdings in collections. BISS will also link into ARCBC's experts and resources metadatabase.

You can find BISS under the 'Gateway to biodiversity' key, as well as under the database button on the ARCBC website at <http://www.arcbc.org.ph>. ■

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