KNOWLEDGE SHARING AND MANAGEMENT APPLICATION FOR NATIONAL WILDLIFE TRAINING CENTER, SRI LANKA

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ABSTRACT

There is a critical need to share and manage biodiversity data for conservation purposes. A comprehensive inventory of biodiversity data on a location together with information on subjects such as habitat use, conservation status, availability of specimens and previous research can benefit both researchers and decision makers. The National Wildlife Training Center (NWTC) is located in the dry zone, close to Minneriya– Giritale Nature Reserve Block II. It is surrounded by well grown Tropical dry mixed forests and harbors a diverse array of fauna and flora including many endemics and nationally threatened species. The center provides compulsory training to staff of the Department of Wildlife Conservation and has facilities for researchers. It is currently being developed to become an International Training School. Therefore, there is a great necessity to have well documented information on the biodiversity of the locality that can be accessed by visitors, trainees and researchers. In addition an advance form of a database can assist to monitor the use of the specimen collection at the museum and help future development of the site that might affect some of the faunal habitats. Thus this project aims to provide knowledge sharing and management solutions using Information and Communication Technology. The objectives of the study are to provide knowledge sharing and management solutions for using Girithale National Training Center as a model, assist maintaining the specimen collection, provide remote access to users, to reduce barrier between researches and application, to simplify the data searching process and to promote data driven decision making.

The project used both primary and secondary data. A biodiversity survey was conducted around the training center in the sanctuary since no previous intensive study on the site has been carried out. The field data as well records from the specimen collection was used as the primary source for project. The research reports at the center were used as secondary sources. The data sharing platform constructed is a web site developed using PHP and the Data base using MySQL. Maps were prepared using digital image processing, use queries, search engine or artificial intelligence agent to retrieve data. In addition a mobile web page was also created. The NWTC could host this web site as a knowledge sharing center.

This system provides a knowledge sharing and management system that will help to protect rare and threaten habitats of Girithale and also will provide easy access to different studies conducted. Thus it finally will reduce the gap between conservationists, researchers, decision makers and public and will also facilitate more informed decision making and efficient use of resources.

Key words: Knowledge sharing, database management, conservation, decision makers, biodiversity