Journal of Multidisciplinary Studies Vol. 4 No. 2, pp. 153-175, December 2015
ISSN 2350-7020 (Print)
ISSN 2362-9436 (Online)
doi: http://dx.doi.org/10.7828/jmds.v4i1.862

Species Richness and Endemism of Herpetofaunain KapataganWatershed, Philippines

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Abstract

Due to the increasing threats in KapataganWatershed, the local government declared that the area is in a critical state. Herpetofauna is a good bioindicator of the watershedhealth but it is poorly known in the area. Hence, a study of the species richness and endemism of herpetofauna in Kapatagan Watershed was conducted. Field sampling for amphibians and reptiles in upland, riverine, lowland, and mangrove areas in the watershed ecosystem using the visual encounter and cruising methods resulted in records documenting the occurrence of 30 herpetofauna species composed of 11 amphibians and 19 reptiles. Fourteen (47%) of the total number of herpetofaunaspeciesare Philippine endemic. Fivespecies that are classified as "Vulnerable" to extinctionwere documented including the two endemic amphibians, *Megophrysstejnegeri*and *Rhacophorusbimaculatus*, and the two endemic reptiles, *Hydrosauruspustulatus* and *Tropidonophisdendrophiops*.Forested sites in upland areas had the highest species richness (N= 26) and calculated species diversity (H'=1.271), while the rice fields in lowland had the lowest values. Huntingfor human subsistenceand land conversion are human-related threats to the herpetofauna in the watershed. The presence of threatened endemic species indicates the need to protect the Kapatagan Watershed as an important habitat resource for herpetofaunal populations.

Keywords: amphibians, bioindicator, ecosystem, reptiles, vulnerable