

D-46: A Preliminary study of the impact of domestic cattle and buffaloes on the status of the Bundala National Park

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Bundala National Park (BNP), because of its location, has become an important grazing area for the domestic cattle and buffaloes in the region. The main aim of the survey was to investigate the impact of these livestock on the status of BNP.

BNP was divided into two zones (high: Weligatta and low : Bundala) based on the abundance of livestock. Population structure of the livestock was studied from June to August 1997 (during the dry season) by "Sample count technique". In addition, Wildlife personnel, grama sevaka and herd owners were interviewed for more information on population dynamics. Percentage ground herbage cover, grazing pressure, rate of accumulation of dung and degree of compacting of soil by hooves, using a rating system, were determined for both zones.

Interview surveys revealed that there were migrant herds and seasonal variations in numbers of livestock. There were 4009 ± 115 (mean \pm SD) domestic cattle and 1716 ± 79 buffaloes that utilized the resources of the BNP. A higher number of livestock was recorded at Weligatta (3110 ± 134). Grazing pressure and degree of compacting of soil were very high at Weligatta (0.92; Score 3) compared with Bundala (0.73; Score 2). Percentage ground herbage cover was low at Weligatta (33.3%) than in Bundala (88.1%) Rate of accumulation of dung was also high in Weligatta (1155 ± 23) than in Bundala (390 ± 12).

The results revealed that livestock cause intensive overgrazing and compacting of soil. This along with the prevailing dry weather may have resulted in formation of unproductive regions. High rates of dung accumulation may have contributed towards the eutrophication of the lagoons in BNP.