

A PRELIMINARY ECOLOGICAL SURVEY OF THE *JATIKA NAMAL UYANA*, GALKIRIYAGAMA

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The *Jatika Namal Uyana* is situated in *Galkiriyagama*, about 6 km away from *Madatugama*, in the *Palagala* DS Division, Anuradhapura District. Its total extent is just over 1200 ha. A portion of it covering about 105 ha. near its northern boundary has a *Na* (*Mesua ferrea*) tree grove. Within the *Na* grove there is also an area of about 24 ha. with scattered archaeological ruins.

The *Jatika Namal Uyana* is important for several reasons. Its geological significance owes its importance to the presence of a unique pink quartz outcrop. This is a massive topographic feature considered the largest one of its kind found in the South Asian Region. Ecologically, the *Na* grove (which, perhaps is a historical horticultural garden) and the habitats in the pink quartz zone, as well as the surrounding forest remnant are of supreme importance. It is a cultural resource due to the following reasons: (1) It is the historical site of a Buddhist monastery or a similar complex. (2). The archaeological remains of this area make it an archaeological site. (3). The *Na* tree is the national tree of Sri Lanka.

The present study was carried out as a field project with the objective of identifying the ecological characteristic of this unique area. The findings cover: edaphic conditions, plants animals and the human factor.

Three principal edaphic/soil units were identified with associated vegetation. (1) 'Erosional Remnants' or pink quartzite outcrops (180-325m asl.) where vegetation is sparse and low in stature (2) 'Foothills or Colluvial Area' (150-180m asl.) with low trees and shrubs and (3) 'Residual Area' (up to 150m asl.) with a two-layered tree vegetation.

Plant species diversity is low in the first area and increases toward the lower areas. There are some endemic plants in the *Namal Uyana*.

Animal life is very rich with several mammals, 33 bird species of which 2 being endemic, and several reptiles and amphibians with at least 2 endemic reptiles. Some of the fauna are considered threatened. This area has been modified considerably by human activities. Yet, at present, the people of the surrounding area do not depend on these forests for livelihood.

The area's ecological importance can be highlighted for several reasons. 1. It forms a part of the watershed of *Balalu Wewa* and also feeds numerous small tanks. It is also important as an elephant habitat, as it is ecologically related to the *Kahala* and *Pallekele* forest reserves situated 12km west and 8km southwest respectively. In view of these ecological reasons and the archaeological, historical and cultural reasons mentioned before, it is important to conserve *Jatika Namal Uyana* for developing non-extractive use of its resources.