

(96)

**Breeding Biology of Dull-blue Flycatcher (*Eumyias sordidus*) in Tropical Montane Cloud Forests of Sri Lanka****Dharmarathne W.D.S.C., Mahaulpatha W.A.D.\***

*Department of Zoology, University of Sri Jayewardenepura, Nugegoda, Sri Lanka*  
*\*mahaulpatha@sjp.ac.lk*

**Abstract**

Breeding biology of Dull-blue flycatcher (*Eumyias sordidus*) was studied in tropical montane cloud forests of Horton Plains National Park. The study was conducted from March 2016 to December 2018 during the breeding season and each visit five to ten days observations were made. Nests were searched using pole and mirror method. Binocular (Nikon™-Monarch, 10×42) was used to study bird behaviours. Incubation patterns such as on-bout and off-bout duration, nest trips rate and nest attentiveness were studied. Nestling diet was observed using a spotting scope (Nikon Monarch™, 20-60×82 ED), hidden camera (SJCAM, M20) and faecal sample analysis. Total of 32 breeding pairs were observed during the study period. They laid a single egg 2 to 3 days after completing the nest construction, and another egg was laid within 24 hrs. The mean clutch size was  $2\pm 0.54$  eggs (n=32), mean egg mass was  $2.51\pm 0.04$  g (n=15), mean egg length was  $21.29\pm 0.32$  mm (n=15) and mean egg width was  $15.20\pm 0.39$  mm (n=15). The average incubation period was  $20.1\pm 2.2$  days (n=16) and the average nestling period was  $14\pm 3.1$  days (n=15). During the incubation period, on-bout duration ( $18.38\pm 6.38$  min) and nest attentiveness ( $78.02\pm 7.51\%$ ) was higher in the evening period. Off-bout duration ( $36.54\pm 6.52$  min) was higher in the dawn period. Nest trips rate ( $6.02\pm 0.67$  h<sup>-1</sup>) was higher in the mid-day. During the nestling period, on-bout duration ( $4.13\pm 2.08$  min) and nest attentiveness ( $70.83\pm 12.42\%$ ) was higher in the morning period. Off-bout duration ( $3.56\pm 1.42$  min) and feeding trips rate ( $9.47\pm 1.19$  h<sup>-1</sup>) was higher during the mid-day. They have selected ten Orders of invertebrates, one amphibian and two plant species to feed their nestlings. Both sexes participated in incubation and brood rearing. *E. sordidus* were monogamous and single-brooded although some pairs made re-nesting attempts after first nests failed. The overall nest success was 90.62%. Jungle crows were the main nest predators of *E. sordidus*. Therefore, control measures need to be conducted to minimise the disturbances to warrant the protection of future generations of *E. sordidus*.

**Keywords:** Breeding biology, Conservation, Tropical Montane Cloud Forests, *Eumyias sordidus*