

# SEASONAL DISPERSAL PATTERNS OF *ADENOMUS KELAARTII* (AMPHIBIA: BUFONIDAE) IN AND AROUND THOTHA OYA, YAGIRALA FOREST RESERVE, SRI LANKA.

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*Adenomus kelaartii* is an endemic species in an endemic genus to Sri Lanka which was only recorded from the wet zone usually in close proximity to streams. It was listed under endangered species category by IUCN and it is in a threat due to inadequacy of data about its seasonal dispersal patterns during the year which are needed for their effective conservation. The present study was thus carried out to discover relevant information that can fill the gaps in herpetology Sri Lanka which helps in conserving Sri Lankan amphibian populations.

To study the seasonal dispersal patterns of *A. kelaartii*, a census was carried out at Thotaha Oya in Yagirala forest reserve Sri Lanka which was situated in the Low Country Wet Zone. It was conducted in three consecutive days per month in January 2014 - February 2014 (Northeast monsoon season- NEM), March 2014 - April 2014 (First inter-monsoon season- FIM), May 2014 - June 2014 (Southwest monsoon season-SWM), October 2014 - November 2014 (Second inter-monsoon season-SIM). Three transects which were 25m long and 2m wide were marked along the stream and the adjacent forest habitats. A distance of 30m was kept between the stream and stream adjacent forest transects. All six transects were surveyed both in the morning (5:30 hrs to 9.30 hrs) and night (17:30 hrs to 21:30 hrs).

The results revealed that the average number of *A. kelaartii* recorded in stream adjacent forest habitats during the NEM, FIM, SWM, SIM were  $1 \pm 0.57$ ,  $14 \pm 2.00$ ,  $22 \pm 2.08$ ,  $19 \pm 1.00$ . Average number of *A. kelaartii* recorded in stream habitats during the NEM, FIM, SWM, SIM were  $20 \pm 2.88$ ,  $19 \pm 1.00$ ,  $1 \pm 0.57$ ,  $1 \pm 0.57$ . Relatively a higher numbers of *A. kelaartii* were encountered in the stream habitats during the Northeast monsoon which was relatively a dry period on for the forest. *A. kelaartii* numbers increased in the stream adjacent forest habitats from Northeast monsoon to Second inter-monsoon which was relatively a wet period for the forest and *A. kelaartii* have abandoned the use of stream habitats during wet season. Present study clearly demonstrated the dispersal patterns of *A. kelaartii* during the year.

**Keywords:** *Adenomus kelaartii*, seasonal dispersal patterns, amphibian conservation