

## A PRELIMINARY INVESTIGATION OF THE BEHAVIOUR OF RUSTY SPOTTED CATS *Prionailurus rubiginosus* IN CAPTIVITY

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**ABSTRACT** - This study focused on the behaviour of the Rusty-Spotted Cats (*Prionailurus rubiginosus*) housed in non-exhibit enclosures at the National Zoological Gardens, Dehiwala, Sri Lanka. The observations were conducted on six focal individuals; four males and two females including two potential breeding pairs. Identification of the focal individuals was done by comparing coat patterns on the flanks and the top of the head and neck region. The spot pigmentation of male focal animals was of apparently darker than that of the female focal animals.

Behavioural data were gathered by conducting direct observations and indirectly using remote camera traps placed inside the enclosures. *Ad libitum* sampling and focal animal sampling were conducted. Remote camera traps were used for night-time observations. Ten minute intervals of continuous sampling was done by the observer in 3-hour sessions during the day time (0600hrs to 1800hrs). Nocturnal observations were made using remote camera traps set to record videos ranging from 2 minutes to 10 seconds depending on the location of the camera, from 1800hrs to 0600hrs. For each individual, a minimum 48 hours of observations were recorded.

Twenty four behaviours belonging to six behaviour patterns were identified. Results indicated that rusty-spotted cats in captivity show behaviours defined as “locomotion/activity” most frequently, especially during the early dusk hours(1800hrs to 2000hrs). Males and female did not differ significantly in terms of frequencies of different behavioural patterns, except for comfort behaviour. Cage furniture and hides have shown to be important for behaviour of the captive cats. Although in the wild they are known to be aggressive and highly agile, the captive animals have shown less aggression and agility. They also have shown very little behaviour under the reproductive behaviour pattern creating doubts about contribution to captive breeding at the zoo. Applicability of results in the context of behavioural study of Rust-Spotted Cats in the wild are discussed.

**KEY WORDS :** Rusty-Spotted Cat, Behaviour, Captivity, Ethogram, Camera trapping, National Zoo Sri Lanka