

TERRITORY IDENTIFICATION, BEHAVIOURAL AND
FEEDING OBSERVATIONS OF SPOT-WINGED
THRUSH (*Zoothera spiloptera*) IN TWO WET ZONE
FOREST PATCHES OF SRI LANKA.

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The study was undertaken to identify territory information and behaviour of *Zoothera spiloptera*. The main objective of the study was to find out its territory size, territorial behaviour and feeding ecology as no previous studies had been carried out on this species. Special attention was also paid to incidental information on the biology and ecology of *Zoothera spiloptera* especially its breeding biology and threats for conservation.

Two study sites were selected from Delwala and Sooriyakanda forests in the Wet Zone of Sri Lanka. The study was carried out from June 1998 to August 2001. Territory mapping and play back methods were used for finding out the size and the functions of the territory. Instantaneous sampling, continuous sampling and ad-libitum sampling methods and opportunistic observations were used for identifying and describing the behaviour of *Z. spiloptera*.

Zoothera spiloptera is a highly territorial bird which maintains its territory throughout the year by singing. Different sizes of territories were occupied by 6 pairs within 2 study sites. Defending the territory by singing a “defensive song” was done by the male bird. Definite feeding areas were observed within each territory at Delwala study sites but it was not possible to find well defined feeding areas at the Sooriyakanda study site, probably due to the small sizes of the territories.

In total 27 behaviours were identified and defined before data collection commenced. 12 were identified as main behaviours. 'Hopping' was the most common behaviour displayed by *Z. spiloptera* and it was the only locomotory action recorded while the birds were on the forest floor. Foraging by hopping was observed throughout the day as a main behaviour. 'Staying still', 'perching', 'preening', 'flying' and 'beak cleaning' were the other common behaviours observed. 15 other behaviours were recognised during the incidental observations which were not common.

Four main feeding strategies (jabbing, flicking, tugging and snatching) were identified under searching and capturing techniques. There was no difference between feeding strategies in the 2 study sites. Insects and berries were the main food items of *Z. spiloptera*.

Complex song phrases were given by the male *Z. spiloptera*. Four different song types and 2 calls were phonetically identified according to function. Vocalisation was significantly different between the two study sites.

The breeding season of *Z. spiloptera* was from July to December at both study sites. The nest was open and cup-shaped, made of dry leaves, roots and moss which was placed on a fork of a sapling about 2 m above the ground. A nesting area was recognised within each territory. *Ligdenia capitellata*, *Xylopiya championii*, *Agroststachys coriacea* and *Euodia lunu-ankenda* were the plant species used for nesting in the study sites.

The distribution of *Z. spiloptera* in Sri Lanka has been reduced since 1880 to date. Its distribution was island-wide when it was discovered but now it is only confined to the wet zone forest patches with the conditions favourable for its habits.

Green pit Viper and Blue magpie were the natural predators for *Z. spiloptera*. Habitat destruction and disturbance and alterations by humans, dogs and cats were common during the study. *Z. spiloptera* was fairly adaptable to these changes but its breeding was highly dependent on closed canopy forest habitats.