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UNIQUE TERMITE GLEANING BEHAVIOUR OF THE TACAZZE SUNBIRD *NECTARINIA TACAZZE*

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Many species of birds are known to be insectivorous; with insects either making up the bulk of their diet, or feeding on them opportunistically in addition to other food sources. Even though arthropods do make up an important part of the diet of most, if not all sunbirds, their primary source of food is nectar, and over time specially adapted bill morphologies have evolved in order to feed on nectar of a variety of different plants (Cheke & Mann 2001). Sunbirds have also been observed feeding opportunistically on invertebrates; gleaning from leaves and flowers, as well as sallying like flycatchers (Cheke & Mann 2001).

The Tacazze Sunbird *Nectarinia tacazze* can be found in a range of habitats from forest patches and edges, to bamboo glades and heathland on mountains, as well as in gardens and cultivated plots (Cheke & Mann 2001). They are a highland species of sunbird, recorded as occurring from 1,800 m to 4,200 m (Brittont 1980). Although primarily feeding on the nectar of flowers, this species has also been recorded to feed on insects in the orders Diptera, Hymenoptera, Psocoptera, Neuroptera, Hemiptera, and small Coleoptera, as well as spiders and mites (Cheke & Mann 2001).

In July 2013 and in June 2015 in Kijabe (0°56'43"S, 36°35'41"E), Kenya, female Tacazze Sunbirds were observed foraging on termites

(order of Blattodea, infraorder Isoptera). They were seen gleaning the termites off the trunks of both African Wild Olive *Olea africana* as well as Pencil Cedar *Juniperus procera* trees. The sunbirds were predated on non-alate (non-winged) worker and soldier termites. Gripping the bark with their feet like a wood-hoopoe, the sunbirds followed, from the ground up, the shelter tubes built by the termites, scraping the soil covering away with their bill and eating the termites as they went. The shelter tubes are soft and made from faeces, saliva, plant matter, and soil (Gold & Mann 2005), and were easily rubbed off the tree by the sunbirds. The sunbirds were being followed by a Baglefecht Weaver *Ploceus baglefecht* which was eating the uncovered termites that the sunbirds passed over.

These observations are the first to document the systematic predation of termites by the Tacazze Sunbird in this way. It is not uncommon for sunbirds to include termites in their diet, but the literature contain no records of other sunbirds seen extracting termites from their shelter tubes in this way. The Scarlet-tufted Sunbird *Nectarinia johnstoni*, Plain-backed Sunbird *Anthreptes reichenowi*, Green Sunbird *Anthreptes rectirostris*, and Blue-headed Sunbird *Cyanomitra alinae*, are a few other species also known to eat termites, however they all glean, or hawk termites from the air (Cheke & Mann 2001), and have not been seen extracting them from their shelter tubes or mounds.

The Amethyst Sunbird *Chalcomitra amethystina* has been seen rubbing termites on a branch after catching them, prior to eating them, however the termites were gleaned as alates and were emerging from their termite mounds on the ground at the time of predation (Cheke & Mann 2001). The Scarlet-chested Sunbird *Chalcomitra senegalensis* has been observed gleaning insects from the bark and crevices of trees, displaying similar behaviour to a spotted creeper, but no reference was made to them predated termites in this way.

The extraction of termites from their shelter tubes by the Tacazze Sunbird is a unique behaviour for sunbirds which has not been

observed and reported for other sunbird species. More observations are needed to determine if this behaviour is commonplace or if it was driven by a lack of easier accessible, more commonly consumed food sources.

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