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The nearly horizontal burrows were up to a foot in length. The lid hinge was at the top or side. As usual there were about eight long stout threads from the rim.

# LITERTURE

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# IV. Unusual Aerial Bathing Behaviour by a Drongo, Dicrurus annectans, (Aves: Dicruridae).

The highly aerial, and short legged, drongos (Dicruridae) are known to bathe from the air, dropping repeatedly into the water for brief moments only, as do members of other aerial groups such as swallows (Hirundinidae) swifts (Apodidae) and terns (Sterninae) (SIMMONS, 1964). ALI and RIPLEY (1972) record this kind of bathing as performed by both the King Crow, *Dicrurus adsimilis*, and Spangled Drongo, *D. hottentottus*.

A peculiar unrecorded form of aerial bathing was observed to be performed by the drongo *D. annectans* on Phuket Island, Thailand on 13 April 1975. Large numbers of this species (confirmed by examination of one specimen) were observed to arrive in the area of the author's house during the first week of April 1974 and 1975 and remained for approximately four weeks on both occasions, being noisy and conspicuous in foliaged and bare tree branches. Presumably these birds were moving north, the species being known to migrate from southern winter quarters

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in Sumatra, Banka, Java and Borneo (RILEY, 1938), Malaysia (DELACOUR, 1947), and Thailand (DEIGNAN, 1963) to breeding grounds in the Himalayas.

At midday on 13 April 1975 a warm sunny day was briefly broken by a light rain shower. At this sudden change four or five of a dozen or more Crow-billed Drongos, *D. annectans*, flew to and perched on the uppermost bare branches immediately available to them and held their wings out horizontal and fully spread their tails. A number of them then fluttered about in wet dense and fine twiglets of bare trees and thence to a perch to preen. Most peculiar and noteworthy of all were the actions of three or four birds which fluttered awkwardly against the wet smooth trunk and larger boughs of the trees breast first, thus utilizing the greater surface area of water to wet themselves. This last behaviour was reminiscent of a bird fluttering with breast against a sheet of glass in an attempt to continue forwards.

Perching in falling rain with wings extended horizontally and tail spread is known bathing behaviour in parrots (Psittacidae) which are described by SIMMONS (1964) as "specialist rain bathers". Fluttering about in wet twiglets is, however, very similar to 'foliage bathing' as is known in parrots, hornbills (Bucerotidae) and some other groups. Thus whilst these two bathing methods appear to be previously unrecorded for drongo species they are known in some other groups, whereas I can find no reference in literature available to me concerning the peculiar technique of flying up against larger wet surfaces. It should be pointed out here that all drongo bathing activity took place on bare trees despite the equal availability of well foliaged trees (i.e, suitable for 'foliage bathing' proper). Previous observations and the notes given here thus indicate that bathing by drongos is highly adapted to an aerial existance in open foliage-free situations.

The author would be most interested to hear of any other observations of bathing behaviour of this, or similar, kind.

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