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THE SYLLABIC NOTATION OF THE RED-EYED TURTLE DOVES STREPTOPELIA SEMITORQUATA OCCURRING ON THE ACCRA PLAINS, GHANA

by

L.Grimes

All handbooks (References 1 to 8) which describe the field characteristics of the Red-eyed Turtle Dove are unanimous in stating that the call is distinctive and is a characteristic sound of the African bush. Although there are several different calls, it is agreed that the most usual one is a sequence of six notes which is then repeated several times. The call is sufficiently onomatopoeic that it can be easily rendered into syllabic notation. Although the result is subjective - none of the eight authors reproduce the same result - the final rendering does not mislead anyone when it is used to identify the dove in the field. Thus for example the syllabic rendering of the call for references 2, 4 and 7 are respectively as follows:-

Coo - koo - ku - ku - ku - ku

Coo Coo, cu - cu coo coo

and Coo, Coo - co, co - co, co

Mackworth-Praed and Grant (Ref.2, 1970) state that the first two notes are accentuated or emphasised and the other authors reproduce syllabic notations in agreement with this.

Through listening to tape recordings of the dove's call made on the Accra Plains in Ghana, it was apparent that it invariably ended its sequence of calls with the two emphasised notes and always began with quiet notes - usually four but sometimes three. These are easily lost in the background of noise if no special effort is made to listen for them. As a result it is the loud fifth and sixth notes which are heard first and this would and may account for the usual syllabic rendering of the call.

These findings have been subsequently confirmed by listening to many individual birds on the Accra Plains at different times of the year. The usual syllabic notation does not apply therefore to the doves on the Accra Plains. This may also be true for the dove in other parts of Africa. A sequence of calls of a dove which was recorded at Buea in Cameroun in December 1970 fitted the pattern found for the Accra birds.

One of several well known faults of the syllabic notation is that it provides no information on the time structure in a sequence of calls (see Ref.9 for a general review). This information may be obtained from a spectrogram and can be incorporated into the syllabic notation of a song if the song is not too complex. This may be done for the call of the dove and a spectrogram of two calls is reproduced in Fig.1.* Some relevant points of interest are as follows. The long pause between the fourth and fifth notes is shorter than the time interval between the end of a call (B in Fig.1) and the beginning of the next call (A in Fig.1). The last three notes are approximately equal in time but are of longer duration than the first three notes which are also approximately equal. Finally the time intervals between the notes, apart from that between the fourth and fifth, are about the same.

A more consistent and accurate syllabic notation, therefore, for the call of the dove found on the Accra Plains would be

Cu - cu - cu - coo , Coo - coo

where the hyphen represents an approximately equal time interval between the various notes, the comma a relatively longer pause and the cu and coo syllables reflecting the time duration of the notes making up the call. This rendering may also apply to other areas of Africa where the dove is located. In sequence and notation it agrees closely with the second type of call described by Dr.Chapin (Ref.4) which he considers shorter than the more usual characteristic call

found in the Congo.

*The spectograms were made using the narrow band filter of a Kaye Spectrograph. There are a few harmonics present on the originals which are not included in the figure.

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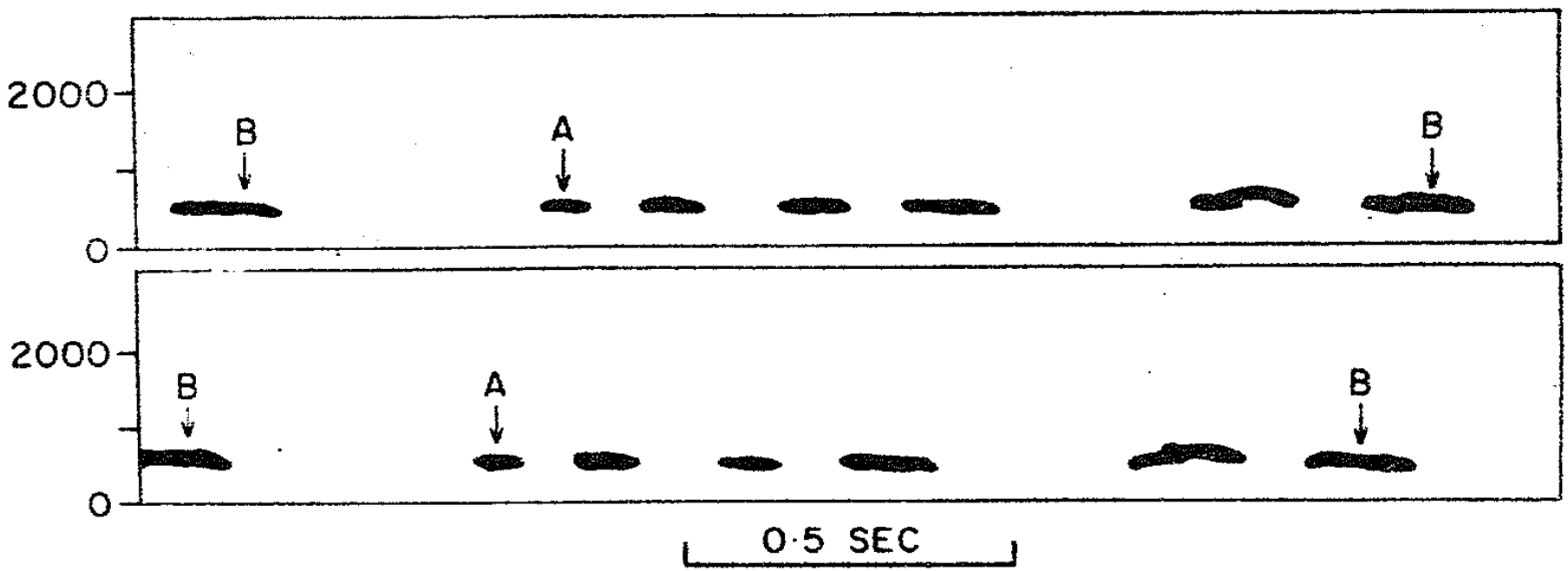
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