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**NOTES ON THE DISTRIBUTION OF *HOLODACTYLUS
AFRICANUS* BOETTGER**

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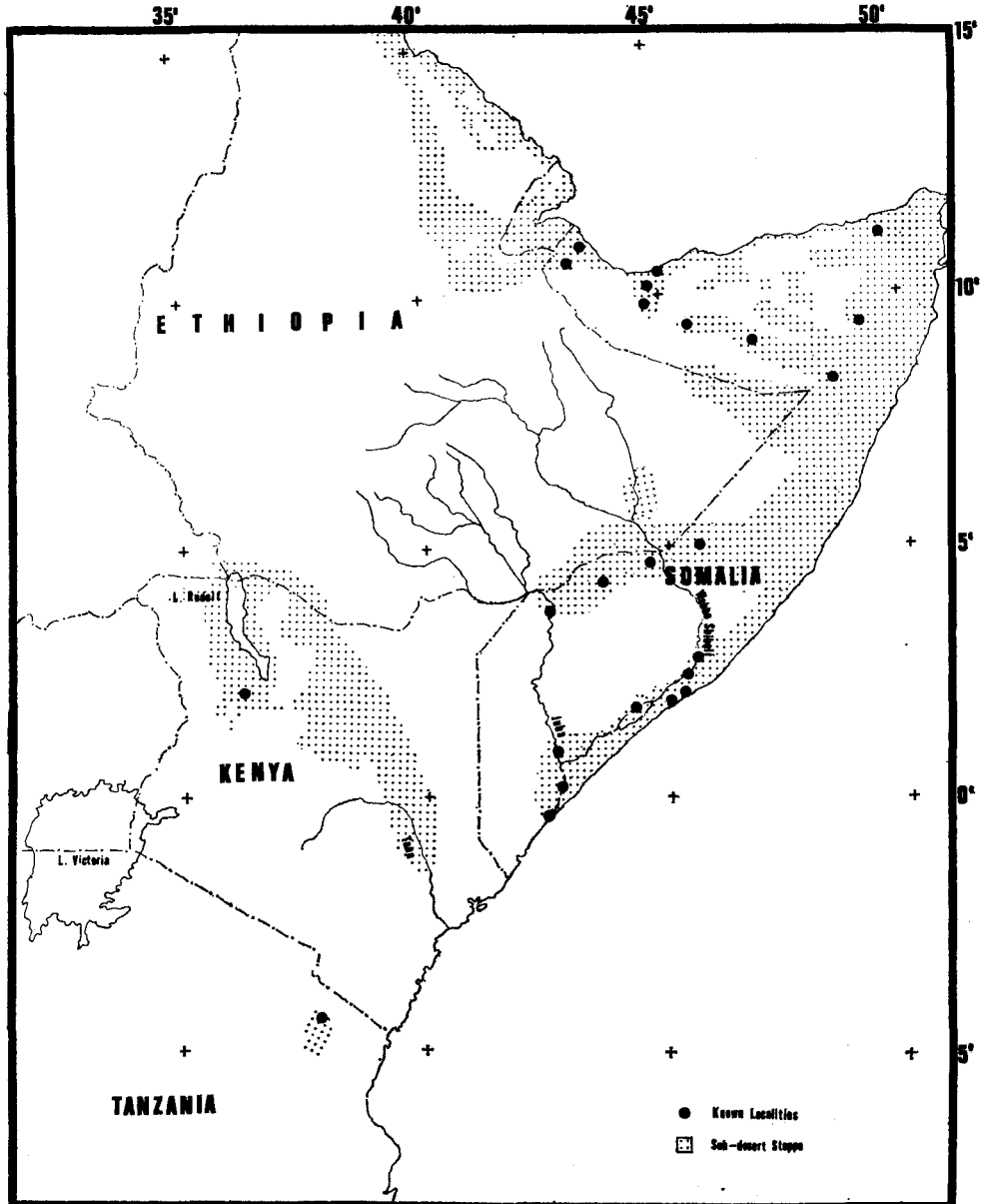
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Holodactylus africanus Boettger occupies a unique position as the only East African eublepharine gecko and one of only two found on the African continent. Its range has been given as Ethiopia and British Somaliland, south through Somalia to Kenya (Loveridge, 1947, 1957). In regard to Kenya, I have been unable to find any heretofore published localities within Kenya, or, indeed, within political East Africa.



Holodactylus africanus (CAS 125431) emerging from burrow, Mkomazi, Tanzania.

During the period June 29 to July 14, 1968, a collection of lizards was made in the Lokori area, Turkana District, Kenya, by the South Turkana Expedition of the Royal Geographical Society. The specimens were sent to the British Museum (Natural History) and identified by E. N. Arnold. Among them was *Holodactylus africanus* (personal communication; specimen not seen by author).



Map of East Africa showing extent of sub-desert steppe and localities at which *Holodactylus africanus* has been found. Somalia localities not found: Cairoi; Negelli; and Gumboworen. Note: Ethiopian locality listed in Loveridge (1947) as "Abdulla" is located in Somalia, just south of the Ethiopian border and west of Webbe Shibeli.

On January 7, 1970, at approximately 8:00 am, following a period of heavy rain, a sub-adult male *Holodactylus africanus* was collected by Dr. E. S. Ross of the California Academy of Sciences at Mkomazi, Tanzania [4°38" S, 38°05" E] (CAS 125431). This is the first record of the genus in Tanzania and represents a considerable range extension to the south. The animal was found emerging from a burrow it had dug in lateritic soil about 6 metres (20 feet) from a termite mound and was photographed *in situ* by Dr. Ross. (Plate).

CAS 125431, which is 78 mm in length (58 mm s.v.+20 mm tail), agrees closely with the description given by Loveridge (1947) for *Holodactylus africanus*. Five termites (*Bellicositermes* [= *Macrotermes*: Termitidae]) were found in the stomach.

The distribution of *H. africanus* seems to agree with that of a particular sub-desert steppe vegetation type which is dominated by widely spaced *Commiphora* and *Acacia* of low stature, with *Salvadora* and *Leptadenia pyrotechnica* (Forsk.) Decne also characteristic. Sub-desert steppe is usually bordered by large areas of wetter wooded steppe composed of more closely spaced *Acacia* and *Commiphora* with grasses of one metre in height, and is apparently transitional between wooded steppe and true desert (Keay, 1959). It extends as a continuous coastal belt with inland extensions from Chisimaio, Somalia, north beyond the Rift Valley in Ethiopia. Isolated areas of this vegetation type exist around Lake Rudolf, south-east along the Tana River to near Bura, Kenya, and in the vicinity of the Usambara Mountains of north-east Tanzania.

Based on available data, all specimens of *Holodactylus africanus* have been found in scattered localities within the sub-desert steppe described, and it seems likely that the animal may be expected in suitable habitats *throughout* the sub-desert steppe. It has not been recorded from west of the Rift Valley (the Kenya locality, according to Gwynne [1969], is on the Rift Valley floor), suggesting that the Rift acts as a physiographic barrier to westward expansion. However, west and north of the Rift extensive sub-desert steppe areas which border the Sahara are poorly known, and *Holodactylus* may eventually be found there.

I suggest that *Holodactylus* probably evolved in the arid sub-desert areas of northern East Africa. At one time it may have had a more extensive range, but subsequent fluctuations in moisture have led to the isolation of populations existing in remnant sub-desert steppe habitats in north-central Kenya and north-eastern Tanzania.

The origins of *Holodactylus* are obscure, for the genus does not appear to be closely allied to any extant group. Indeed, Kluge (1967) suggests that the differences between *Holodactylus* and *Hemitheconyx*, the only other African eublepharine, point to separate evolutionary lines.

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