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NATURAL HISTORY NOTES

VARANUS BENGALENSIS (Bengal monitor): UNUSUAL BEHAVIOUR AND FEEDING.

During July 2005, as part of the Knuckles Expedition (De Silva, 2005), we conducted field studies on thermoregulation in *Calotes versicolor* at Hettipola (Meek *et al.*, in press), an area that lies on a flat plain at the edge of the Knuckles Massif in Central Province, Sri Lanka. At the time of our study, it was the dry season and operative temperatures exceeded 40°C daily. We frequently observed foraging *V. bengalensis* in the study area and all the observations reported here relate to this study site. Most sightings were after midday when they appeared to be searching for prey species. One lizard with an s.v. length of approximately 25 cm had a home site across from our hotel where we often saw it return either mid-afternoon or evening. This individual was easily recognised because of a damaged tail. One evening, an hour or so after dark, one of us (E.J.) saw this individual sitting partly outside its burrow in what appeared to be a type of sentinel behaviour (see cover illustration). It remained in this posture for some time and never ventured from its home-site. The lizard was approached (by E.J.) to a distance of about 0.5 metre, but it made no effort to escape and remained in its position. Air temperatures were around 30°C and within normal body temperature ranges recorded for this species (Meek, 1978; Wikramanayake & Green, 1993; review in Bennett, 1998).

The Bengal monitor is a typical varanid in that it forages diurnally for a wide variety of animal prey often over large distances (Auffenberg, 1994). Our observations at Hettipola indicated that they foraged in both terrestrial and arboreal microhabitats (Fig. 1). Dave (1960) observed movement at night but in an extensive study and review Auffenberg (1994) was unable to confirm this although he refers to an observation by a Mr Sanjeevaraj in Madras, India of a *V. bengalensis* foraging at 02:00 hrs for toads under a street light. We cannot confirm any feeding behaviour after dark, but it is difficult to imagine the lizard ignoring a prey animal if it wandered within striking distance.

On the afternoon of July 22nd we were alerted by hotel staff to a sub adult *V. bengalensis* (s.v. length approximately 15 cm) that had captured an adult Cricket frog or Paddie-field frog (*Limnonectes limnocharis*) at the front of the hotel and was in the process of swallowing it (Fig. 2). The frog was swallowed initially by continually being pushed against the ground then finally by inertia movements. This is the usual method employed by Varanids when the prey is large relative to body size. Apparently, vertebrate prey is comparatively rare in *V. bengalensis* (Bennett, 1998) and although is known to include frogs, there are no records of *L. limnocharis* as a prey species (Auffenberg, 1994). We observed another individual (s.v. length approximately 20 cm) eating six snails of an unknown species. Before swallowing the lizard crushed the shells by mastication then forced them into the stomach by the usual inertia movements. Hard-shelled prey is taken by adult Nile monitors (*V. niloticus*) and are crushed before swallowing. There are ontogenetic changes in the dentition for this dietary shift, where the teeth become broader and molar-like (e.g. Rieppel & Labhardt, 1979). We are not aware of this condition in *V. bengalensis*.

Finally, on two occasions we fed dead bats to foraging *V. bengalensis* (Fig. 3), one of which had just previously been foraging on the branches of a tree (Fig. 1). These were readily accepted suggesting the lizards consume just about any prey animal they come across. After consuming the bat (at around 14:00 hrs), the first animal immediately



Figure 1. Arboreal foraging in *Varanus bengalensis*.



Figure 2. Subadult *V. bengalensis* consuming an adult *Limnonectes limnocharis*.



Figure 3. One of two specimens of *V. bengalensis* consuming a dead bat offered by the authors.

retreated to what appeared to be its home site where it remained for the rest of the day. This may have concerned digestion as the general environmental temperatures at the time were high – even at midnight air temperatures were in the region of 28°C and by early morning still around 25°C, so basking to raise body temperatures may have been unnecessary.

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EDIE JOLLEY¹ and ROGER MEEK²

¹ 16 Mountfields, Halifax, West Yorkshire, UK.
Email: ediejolley@yahoo.co.uk

² 7 Rue Georges Clemenceau, Chasnais, France.
Email: Rogermeek85@aol.com