***VARANUS SALVATOR* (Water monitor): INTRA-SPECIFIC AGGRESSION**. Intra-specific aggression in lizards is well known, particularly in males. In monitor lizards (*Varanus* spp.) it is believed to occur for a variety of reasons, usually over resources - food, shelters and access to females for males (Horn *et al*., 1994). Here we describe a brief observation of intra-specific conflict in *V. salvator* at Hettipola, Central Province, Sri Lanka. The observations were in made during July 2005 at the locality described in a recent note (Jolley & Meek, 2006). Each morning, from around 7am local time, we regularly observed up to at least six large *V. salvator* foraging or basking in a canalised waterway of less than 0.5 km. All individuals observed were approximately 2 metres in total length, indicating mature animals (e.g. Andrews, 1995; Bennett, 1998). Basking was common at this time of day (dry season) with daily operative temperatures usually above 40°C and although we never measured water temperature, we estimate this was around 20-25^{o}C at the time.

At approximately 07:30 h local time, a large *V. salvator* swimming along the waterway was seen to come into contact with another individual, almost as large, basking on the bank. The lizard in the water approached the basking lizard very slowly and at a distance of around a metre emerged and attacked the second lizard (Figure 1). Unfortunately, the actual speed at which the incident occurred made it difficult for detailed observations – we could not, for example, ascertain whether biting was involved, but the basking lizard quickly retreated into the water and submerged. The larger animal also returned to the water but remained swimming on the surface and appeared to be looking for the other animal, which we never saw resurface. Within 15 minutes or so of the incident another of our research group, John Drake, prompted by our observations, returned to the locality (less than 3 minutes walk from our base), and recorded and photographed combat behaviour between

Figure 1. Combat behaviour in *V. salvator*. Following a slow approach to the basking lizard, the animal in the water is just about to launch its attack. © R. Meek.

two large *V. salvator*. The lizards were in the water in a typical horizontal embrace but also reared up out of the water in a bipedal posture. However, we cannot be certain they were same lizards as those in the incident we observed.

The narrow waterway combined with high operative temperatures may have had a contributing effect to the incidents, making it difficult for the lizards to avoid contact. For example, our observations of foraging (dry season) indicated that this was generally an aquatic activity with brief excursions onto the bank, whereas in much cooler overcast weather during the rainy season at Kandy Lake, it was largely terrestrial, with entry into the water seemingly only to cross to the opposite bank. Conflict and/or combat behaviour is known in *V. salvator* but is usually a terrestrial activity, with apparently no previous reports of its occurrence in water (review in Bennett, 1998). Additionally, monitor lizards are notoriously difficult to sex, even at close inspection, and so we cannot be sure of the sexes of the lizards involved. Defence of territory between males or conflict over basking sites (Bennet, 1998) are obvious suggestions, but female defence of a nesting area is a further possibility. This is known in females from several Varanids (Horn, 1999) and *V. salvator* is known to nest in water banks and can be aggressive just prior to egg laying (Bennet, 1998). Interestingly, in captivity, combat behaviour has been observed between both males and females as well as between females, usually over basking sites or nest boxes (Wicker *et al*., 1999).

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