

Human Food Scrap Ingestion in Two Wild Lace Monitors *Varanus varius*

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Abstract – Monitor lizards are known for being both predators and scavengers in their search for food. Their ability to be opportunistic is clearly demonstrated where large species live in close proximity to humans and take advantage of any food that may be accessible. In some situations this habit can be detrimental to the health of monitor lizards, and in some cases may lead to a slow and agonizing death. This record illustrates the risk food scraps can pose to monitors accessing non-natural food items in camping areas and picnic grounds, and highlights the need for the proper disposal of food waste, utensils and other waste items in areas where they may be accessible to wild animals.

Introduction

The lace monitor, *Varanus varius*, is common along the east coast of Australia and prefers well-timbered habitat (Wilson, 2005). Subsequently, in national park and recreational areas including picnic and camp grounds, there is indirect interaction between people and monitors. Monitor lizards exhibit both predatory and scavenging behavior (Wilson, 2005) and are generally reported to feed on birds, mammals, reptiles, insects, vertebrate eggs and carrion (Weavers, 1989; Guarino, 2001). Both visual and olfactory cues play an important role in prey detection.

Varanus varius often frequent picnic and camp grounds in search of human food scraps, particularly coinciding with weekends and public holidays where human use of these areas is highest (Fig. 1). Not surprisingly, the number of monitor lizards is often influenced by the presence of human food scraps and it is not unusual to have multiple monitors foraging within a single picnic area. Some specimens even climb tables

and chairs or enter tents, all in the presence of humans (Fig. 2; pers. obs.). Conversely, *V. varius* that are not regularly exposed to people become wary, and routinely retreat up trees if disturbed.

Unnatural food items are a potential health hazard to monitor lizards, as they are for many other wild animals. Multiple complications such as gastrointestinal blockages, perforations, suffocation and poisoning can occur when these items are eaten. Freshly cooked bones and plastic bags containing meat are particularly attractive to carnivorous species such as monitor lizards and are commonly discarded in picnic areas. If food items are found by a monitor lizard, they will often try to ingest them whole, as they would with natural prey. If discarded bones are large, have sharp points, or are unusually shaped, complications with ingestion may occur. Little scientific information is published on this subject, and it is hopeful that the case studies presented herein will assist with public awareness on this issue.



Fig. 1. *Varanus varius* basking at a picnic ground. Rainbow Beach area, southeast Queensland.



Fig. 2. This scavenging *V. varius* is searching for an entry point into a tent in the presence of humans. Southeast Queensland.

Observations

Case 1

On 31 December 2009, a 1.9 kg *V. varius* was presented for veterinary assessment after being collected from the Teewah Beach area, Queensland, Australia with a sharp bone protruding from its throat.

On presentation the animal was active and alert, but extremely dehydrated and emaciated. The throat of the animal was severely distorted by a large, hard, bony mass. Approximately 6 cm of bone protruded through the skin on the right side of the neck and two wounds over part of the hard mass were visible on each side of the neck (Figs. 3 & 4). Tissue fibrosis had formed around the wound; however, no other injuries or overt sign of disease were identified. It was presumed that the monitor's emaciated state was due to lack of food intake resulting from the oesophageal obstruction. The animal was anaesthetized to facilitate removal of the object.

Once anaesthetized, further investigation of the mass and an oral examination revealed the object to be a large bone from a T-bone steak, the longest portion of the bone measuring approximately 16 cm. Surgical bone cutters were used to remove the protruding end of bone, while the rest was manipulated and removed via the mouth.



Fig. 3. Bone from T-bone steak in situ.



Fig. 4. Approximately six cm of bone protruding through skin on the right side of the neck.

The oesophagus was inspected thoroughly for signs of damage and the oesophageal mucosa thoroughly debrided, flushed with antiseptic solution and sutured closed. The external skin wounds were similarly treated. There appeared to be no damage to the bony and cartilaginous structures of the throat.

Antibiotic and fluid therapies were instituted, and food and water withheld for 24 h. The animal also received an injectable deworming solution at the time of the procedure.

Twenty four hours after surgery, the monitor was offered a small amount of food in the form of defrosted rodents, which it ingested without complication; increasing amounts of food were offered over the next week. The monitor ate extremely well in captivity and remained in care for a further four weeks, allowing it time to recover fully before successfully being released.

Case 2

A 4.5 kg *V. varius* was presented for veterinary assessment on 26 January 2010 after picnic goers in Noosa National Park, Queensland observed it ingesting a plastic fork which had a piece of meat attached.

The monitor was extremely alert and active on presentation and required general anaesthesia for examination. Palpation of the cranial abdomen revealed a firm mass in the stomach region. Further examination included radiographs which did not clearly define the palpable mass in the cranial abdomen.

No treatment was instituted, and within 24 h. the monitor regurgitated food scraps and a single plastic fork. The animal remained extremely active and was released 24 h later.

Discussion

The only other documented record of food scrap ingestion of this nature in a monitor applies to a *V. panoptes* at Lichfield National Park, Northern Territory. This animal was found in an advanced state of decay with three wooden barbecue skewers located approximately where the stomach would have been (Trembath & Freier, 2005).

Beaches and national parks are popular camping and picnicking spots for locals and tourists, with wildlife being one of the main attractions. Unfortunately, however, there is a common interaction between humans and wildlife involving unnatural food items. Presented here are vivid examples of how animals can be impacted by ingesting inappropriate items, which highlight the need for secure and proper rubbish disposal.

In order to increase awareness amongst the scientific and public arenas on the danger unnatural food item ingestion poses to wildlife, we encourage readers to publish their records relating to such matters.

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