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## SHORT NOTE

### PREDATION ON A SPARROW BY A POSSUM

While observing brush-tailed possum (*Trichosurus vulpecula*) behaviour in the captive colony maintained at Forest Research Institute in Rangiora, I saw the predation of a House Sparrow (*Passer domesticus*) by a possum. The event occurred in a pen holding five females and five males. Occasionally small birds become trapped in the pens, having been attracted by the food provided for the possums.

About 1 hour after dusk at 6.25 p.m., a roosting sparrow started to flutter around the pen, apparently being disturbed by a sudden south-westerly shower. Two minutes later, a male possum leapt from a side fence of the pen, caught the sparrow in mid-air with its forepaws, landed on the ground about 1.5 m below, and transferred the bird to its mouth. The event attracted the attention of other possums, notably a dominant male and a dominant female, who briefly chased the captor. After about 20 seconds, he secured a safe position on a fence rail, where he proceeded to bite the dorsal surface of the bird's neck, probably to kill the bird, before eating parts of the head. Four minutes after the bird was seized, all that remained of the head was the beak and rejected pieces of bone tissue. The possum then started removing breast feathers with its teeth and proceeded to feed on the

breast region. Subsequently, five other possums, including the dominant male and female of the group, investigated the carcass until observations ceased at 7.25 p.m. Two of these five other possums ate flesh from the carcass but the other three, whose position in the social hierarchy of the colony was ranked as 1st, 2nd, and 4th, seemed more concerned with asserting status over the carcass than eating it.

I inspected the carcass at 7.30, and noted that the soft tissues of the head, breast and legs had been eaten. In the morning, the carcass was no different.

The feeding habits of the brush-tailed possum have been well documented in several studies in which contents of a total of 1898 stomachs were analysed (Mason 1958, Gilmore 1967, Harvie 1973, Purchas 1975, Warburton 1978). Although the animal is mainly herbivorous, Warburton (1978) and Clout (1977) showed that insects may be eaten as chance occurs. I have watched captive possums catching moths (*Porina* sp.) during the summer months while fossicking in grass. In fact, a fluorescent lamp used as a moth attractant provides a cheap source of food for captive possums in summer.

Perham (1924) gave two separate instances in which remains of unfledged birds and feathers were found in stomach contents and concluded "but that the eating of such is generally a trait of the animal is not substantiated."

My observation above suggests that some possums may have the inclination to catch and eat birds, given the opportunity, just as they are attracted to fluttering insects. Certainly one of the possums was a predator and two others were flesh-eaters. Being semi-arboreal and nocturnal, possums may occasionally disturb birds from their nests, and fledglings particularly would be easy prey. If this is only an occasional habit of some possums, absence of bird remains in stomach contents is not surprising. The possum carefully manipulates its food while eating and rejects unwanted parts such as the peel of apples and carrots. Most bone fragments and feathers of the sparrow carcass were rejected. If the flesh of a bird was ingested, following mastication and partial digestion, it could well be ignored or recorded only as "unidentifiable" matter in stomach contents.

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