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SHORT NOTE

Weka (Gallirallus australis) predation of a house mouse (*Mus musculus*)

SHAUN C. OGILVIE

Department of Ecology, P.O. Box 84, Lincoln University, Lincoln 7647, New Zealand

The weka (*Gallirallus australis*) is a large, flightless rail endemic to New Zealand. The diet of the weka typically consists of invertebrates and fruit, but they are also known to take seeds, small reptiles, seabird chicks and eggs, and carrion (Beauchamp 1987, Heather & Robertson 1996). I report here

an observation of a weka pursuing, capturing, and consuming a live, wild house mouse (*Mus musculus*).

From Jul 1994 to Jun 1996, I was involved in a research programme that trialled new baits for rat control (Ogilvie & Eason 1996). Part of this research was to assess the risk to weka of being poisoned by baits in control operations. In Sep 1995, 18 weka were captured from a single population on Long

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*Correspondence: Shaun.Ogilvie@lincoln.ac.nz

and Arapawa Is in the Marlborough Sounds using cage traps baited with raw fish or cheese. Birds were then transported by sea and road to the Johnson Memorial Laboratory, Lincoln University. Upon arrival, each weka was placed in a hessian sack for weighing, and then released into an outdoor 8 x 8 m enclosed wire mesh pen. Each pen had a nest box of hay, and some of the pens, which had previously housed possums (*Trichosurus vulpecula*), contained cereal pellets freely available in feeding stations.

In one pen, mice were resident in the hay, and were likely feeding on the cereal pellets. When a weka was released into this pen, it emerged from the hessian sack, and immediately assumed an alert posture, looking in the direction of the hay nest box, which was about 5 m away. The weka then moved slowly, and apparently purposefully, toward the next box, all the while gazing at the hay. Once it reached the nest box, it lunged its bill into the hay, and withdrew it, holding a live house mouse. It then swallowed the mouse whole (head-first), in several gulping motions, with its head vertically in the air.

To my knowledge there are no published observations of weka preying on live, free-ranging wild mice, or any other wild mammal. While difficult to confirm, the weka reported here seemed to have a familiarity with mice. It immediately sensed the mouse was present in the nest box, and responded in a manner that would indicate an awareness of mice as potential prey. It also appeared familiar with how to consume the mouse. Kiore (*Rattus exulans*) were present on both Long and Arapawa Is (Atkinson & Towns 2005) at the time of the study, and Arapawa Is also has ship

rats (*R. rattus*) (Innes 2005) and house mice (Ruscoe & Murphy 2005). The behavioural observations described here, and the knowledge that this weka came from a location with rodents, support the idea that mice, and perhaps rodents in general, might be common prey for weka in the wild. This could have important ecological ramifications worthy of further investigation.

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LITERATURE CITED

- Atkinson, I.A.E.; Towns, D.R. 2005. Kiore. In: King, C.M. (Ed.) *The Handbook of New Zealand Mammals*. Pp. 159-173. Oxford: Oxford University Press.
- Beauchamp, A.J. 1987. The social structure of the weka (*Gallirallus australis*) at Double Cove, Marlborough Sounds. *Notornis* 34: 317-325.
- Heather, B.D.; Robertson, H.H. 1996. *The field guide to the birds of New Zealand*. Viking: Auckland.
- Innes, J.G. 2005. Ship Rat. In: King, C.M. (Ed.) *The Handbook of New Zealand Mammals*. Pp. 187-203. Oxford: Oxford University Press.
- Ogilvie, S.C.; Eason, C.T. 1996. *Laboratory, pen, and field trials of cholecalciferol for rat control*. Unpublished Landcare Research Contract Report. 14pp.
- Ruscoe, W.A.; Murphy, E.C.M. 2005. House mouse. In: King, C.M. (Ed.) *The Handbook of New Zealand Mammals*. Pp. 204-221. Oxford: Oxford University Press.

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