

regurgitated larva, we presumed that the snake swallowed it from the head. We were unable to determine if the snake fed on the larva and earthworm independently or on the earthworm being bitten by the larva, because the larvae of *Stenocladius* are known to feed on earthworms (Ohba et al. 1996. *Sci. Rept. Yokosuka City Mus.* 44:21–31).

We thank N. Ohba and Y. Yamane for identifying the stomach contents and A. Mori for his valuable comment on the manuscript.

IBUKI FUKUYAMA, Faculty of Agriculture, Kyoto University, Oiwake-cho, Kitashirakawa, Sakyo-ku, Kyoto 606-8502, Japan (e-mail: ibu_fukuyama@icloud.com); **TOMONORI KODAMA**, Faculty of Science, Kyoto University, Oiwake-cho, Kitashirakawa, Sakyo-ku, Kyoto 606-8502, Japan

DIADOPHIS PUNCTATUS (Ring-necked Snake) and **STORERIA OCCIPITOMACULATA** (Red-bellied Snake). **PREDATION.** Small woodland snakes are commonly preyed by invertebrates (Ernst and Ernst 2003. *Snakes of the United States and Canada*. Smithsonian Books, Washington, D.C. 668 pp.). Here, we provide observations of two woodland snake species, *Diadophis punctatus* and *Storeria occipitomaculata*, being attacked or preyed upon by *Faxonius cristavarius* (Spiny Stream Crayfish).



FIG. 1. *Faxonius cristavarius* holding *Storeria occipitomaculata* after being captured.



FIG. 2. *Faxonius cristavarius* feeding on a *Storeria occipitomaculata* after release.

This is the first documented observation of active predation on either *D. punctatus* or *S. occipitomaculata* by a crayfish. At 0210 h, on 14 July 2018 on University of Kentucky's Robinson Forest in Knott County, Kentucky, USA (37.4639°N, 83.1193°W; NAD 83), one of us captured an adult *D. punctatus* within the riparian zone of an intermittent stream. The captured snake was rinsed in a stream to remove musk and subsequently attacked by an *F. cristavarius*. Although we removed the crayfish from the *D. punctatus*, we noticed that the crayfish was actively searching in the stream for the snake. Shortly after the predation attempt, we observed a second *F. cristavarius* feeding on a *S. occipitomaculata* at 0220 h (Figs. 1, 2). The *F. cristavarius* was captured and photographed, yet it did not release the prey item. These events suggest that *F. cristavarius*, and likely all larger stream dwelling crayfish, actively prey upon small woodland snake species (as well as small aquatic snakes; Ernst and Ernst 2003, *op. cit.*) when they enter aquatic environments.

PHILLIP L. ARANT (e-mail: philliparant@gmail.com), **DREW WHITE** (e-mail: drew.e.white1@gmail.com), and **STEVEN J. PRICE**, Department of Forestry and Natural Resources, University of Kentucky, Lexington, Kentucky 40536, USA.

HEBIUS PRYERI (Pryer's Keelback Snake). **PREDATION.** *Hebius pryeri* is a mid-sized colubrid snake that is endemic to the Okinawa and Amami Islands in the Ryukyu Archipelago, Japan (Kaito and Toda 2016. *Biol. J. Linn. Soc. Lond.* 118:187–199). The snake is cathemeral and preys on lizards, frogs, and amphibian larvae and eggs. Its only reported predators are three other snakes (*Dinodon semicarinatum*, *Protothrops flavoviridis*, and *Ovophis okinavensis*), and knowledge of these prey–predator relationships is limited (Hamanaka et al. 2014. *Bull. Herpetol. Soc. Jpn.* 2014:167–181). Here, I report the predation of *H. pryeri* by the *Otus semitorques pryeri* (Japanese Scops Owl).

On 6 March 2018, I observed an *O. s. pryeri* holding down an adult *H. pryeri* (Fig. 1) on an asphalt road in Uka, Kunigami, Okinawa-jima Island, Japan (26.8108°N, 128.2725°E; WGS 84; 293 m elev.). The snake was immobile, and the owl repeatedly pulled the snake's neck upward using its beak. A few minutes later, the owl flew into the forest by the side of the road with the snake in its talons.

The diet of *O. s. pryeri* consists mainly of insects, non-insect invertebrates, and reptiles, including snakes (Toyama and Saitoh 2011. *J. Raptor Res.* 45:79–87). However, there is no detailed description which snake species are consumed or the owls' predatory behavior. My observation revealed that the owl uses *H. pryeri* as a food resource, but it is unknown whether the snake was alive or dead when the owl captured it. There are snakes smaller than *H. pryeri* inhabiting the Ryukyu Archipelago, which may be preyed upon by owls. Further



FIG. 1. Predation of *Hebius pryeri* by *Otus semitorques pryeri*.