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GREAT HORNED OWL OBSERVED "HAWKING" INSECTS

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On 20 October 1986 at 1848 H we observed a Great Horned Owl (*Bubo virginianus*) perched atop one of many snags in a flooded bog alongside a forestry fire road of the Sandilands Provincial Forest, Manitoba, Canada. A second Great Horned Owl was perched approximately 30 m distant. The "pair" maintained vocal contact intermittently, which suggested that the second owl was a male, having a lower pitched call (Austing, G. R. and J. B. Holt. The world of the Great Horned Owl. Lippincott Co., 1966).

The male made several short flights of varying heights (one to four m) over the bog and returned to the same perch or one nearby. These occurred during the first 30 of the 45 min we observed the owls. Using a 45x spotting scope we observed the male owl consuming large beetle-like insects while perched. The beetles were most likely *Dytiscus* sp. which were observed to emerge from a ditch adjacent to the fire road with an audible "plop," and the hum of their wings could be heard up to 5 m away. The male caught at least five beetles in his bill during observed "hawking" flights, but the female was not observed to do so. However, at 1918 H both birds landed on the fire road and consumed live beetles. At 1933 H there was insufficient light to continue observations.

Our observed "insect hawking" provides further evidence of the opportunistic feeding behavior of this generalist owl. Remains of at least four genera of beetles, including *Dytiscus* and other invertebrates, have been found in Great Horned Owl pellets (Hamerstrom and Mattson,

Am. Midl. Nat. 22(3):700-702, 1939; Errington et al., *Iowa Agric. Exp. Stn. Res. Bull.* 277:758-850, 1940; Bent, A. C., Life histories of North American birds of prey, Part II. U.S. Nat. Mus. Bull. 162, Washington, DC. 1961). Errington et al. (1940) could not conclude if insects were eaten directly by owls or consumed along with the stomach contents of other prey. Where insects were undoubtedly owl prey they are considered conspicuous crawlers, carrion feeders or predators, etc., attracted to carcass fragments about feeding places (Errington et al. 1940). Errington et al. (1940) also explained insect fragments in pellets as reflecting the partial dependence of inexperienced young owls upon types of prey that are easy to catch, including invertebrates. Our observation provides evidence that direct captures of flying insects may explain the occurrence of some of the insect matter found in Great Horned Owl pellets. Insect foraging would be more economical energetically for smaller sized males with greater aerial maneuverability (Mueller, H. C., *Wilson Bull.* 98(3):387-406, 1986), although both sexes were observed consuming insects on the ground.

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