

# LICE PARASITIZING THE GREAT GRAY OWL, *Strix nebulosa* IN MANITOBA, CANADA.

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Ninety-three Great Gray Owls, *Strix nebulosa*, were salvaged from the Manitoba Wildlife Rehabilitation Organization and from Manitoba conservation Wildlife Branch during 1994 to 2002. Most of these owls (55) were collected during the winter months, December to March, but at least one owl was collected in each month of the year. All birds died or were euthanised as a result of traumatic injury, or in a few cases, were found dead in the field; each bird was individually bagged and frozen as soon after death as possible, for at least 7 days to kill ectoparasites. Initially, birds were inspected manually for ectoparasites, but all birds examined since 1995 have been washed twice in warm, soapy water and once in clear warm water. Water from each wash was strained through a 90 $\mu$  sieve and all ectoparasites were preserved in 70% ethanol until they could be sorted and identified.

The most frequently collected louse was *Strigiphilus remotus* (Kellogg and Chapman, 1899). More than half (n = 54; 58.1%) of the owls were infested with this species, at a mean intensity of 65.2 (range 1 to 867) lice per infested bird. Juvenile *S. remotus* were present in all months that owls were collected, even throughout winter. The only other species of louse collected from the Great Gray Owl (with the exception of one male *Degeeriella* sp.) was *Kurodaia magna* Emerson, 1960. Although the mean intensity for this species 66.4 per infested owl (range 1 to 216) was not substantially different from that for *S. remotus*, only 10 of 93 owls (10.8%) were infested with *Kurodaia*. Eight of the 10 infested owls clearly supported a reproducing population of *K. magna*, with many males, females and juveniles present and of these, all were also infested with *S. remotus*. Two owls were infested by only one *Kurodaia* each (one male and one female, respectively), and these two birds carried no *S. remotus*. No juveniles of *Kurodaia* were found on birds that were not also infested with *S. remotus*.