

EPIDEMIOLOGY OF CHEWING LICE (*BOVICOLA OVIS*) INFESTING SHEEP IN ENGLAND AND WALES.

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There has been a recent increase in the prevalence of *Bovicola ovis* in England and Wales since lifting compulsory dipping for the sheep scab mite (*Psoroptes ovis*) in 1992. The clinical signs of louse infestation can be confused with scab and thus possible resistance problems may result if the correct treatment is not applied. Sheep can present mixed infestations of *P.ovis* and *B.ovis*, although pre-existing infestations of lice make it difficult for scab mites to colonise. Lice can colonise sheep with pre-existing scab with relative ease. Endectocide injections (doramectin, ivermectin or moxidectin) for the control of scab came onto the UK market from 1992 onwards and are now overtaking plunge dipping in organophosphate or synthetic pyrethroid dipwash as the chosen method for scab control. Unfortunately endectocides are not effective against chewing lice and in the case of mixed infestations, leaving them to exploit the scab lesion vacated by the mites. The majority of infestations occur in winter (January to April), although cases have been reported in mid-summer (June). Studies into the basic epidemiology of *B.ovis* scored lesions as light (below 20 lice/sheep), medium (21 to 100 lice/sheep) and heavy (above 100 lice/sheep). Preliminary results have demonstrated that prevalence within flocks can vary, with the majority of sheep (42.3%) carrying light infestations. Medium or heavy infestations accounting for 22.0% and 16.7% of sheep respectively. Significant numbers of sheep (19.1%) appeared to be uninfested, despite light to heavy infestations on contact sheep within the flock. Lambs appeared to be more susceptible than ewes. Populations of lice were also influenced by fleece length, with high populations observed on sheep with long fleece and by body condition score, the lower the body condition score the higher the population of lice. It is not certain whether louse infestations bring down the condition of the animal or if the lice exploit an animal already out of condition due to concomitant infections or bad husbandry. Thus chewing lice can be a significant indicator of underlying welfare problems within a flock.