Seasonal infestation of donkeys by lice: phenology, risk factors and management.

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Source


Materials and methods

A longitudinal study was undertaken over a 21 months period to examine the seasonal abundance of lice infesting donkeys, the risk factors which predispose donkeys to infestation and the effectiveness of louse management.

Results

All the lice seen were Bovicola (Werneckiella) ocellatus. A strong seasonal pattern, which was correlated with mean monthly temperature, was observed with higher prevalence and intensity in the cooler, winter months (October-March). Overall infestation in these animals was over-dispersed, suggesting that some individuals are strongly predisposed to infestation. Donkey age and mean hair length were characteristics which affected louse prevalence: older and younger donkeys and donkeys with longer hair harboured the highest numbers of lice. However, the practice of coat-clipping, to reduce the infestation, resulted in a lower louse prevalence only in the summer, suggesting that clipping is not an effective form of louse control in cooler months. Higher louse burdens were associated with larger areas of visible excoriation and hair damage, suggesting that *B. ocellatus* does adversely impact animal welfare. However, the ability of animal carers to estimate louse presence or absence accurately on an individual donkey was not sufficiently high to allow targeted selective treatment of heavily infested animals to be employed effectively.

Conclusions and clinical relevance

As animals are housed in closed herds these findings suggest that clipping in the summer and treating all animals with insecticide in late autumn, prior to turn-in may be an effective louse management strategy.