

# Animal Health

## Ectoparasites: Lice

### SEBWAT parameter

(Standardised Equine-Based Welfare Assessment Tool)

#### Ectoparasites

### Welfare issue

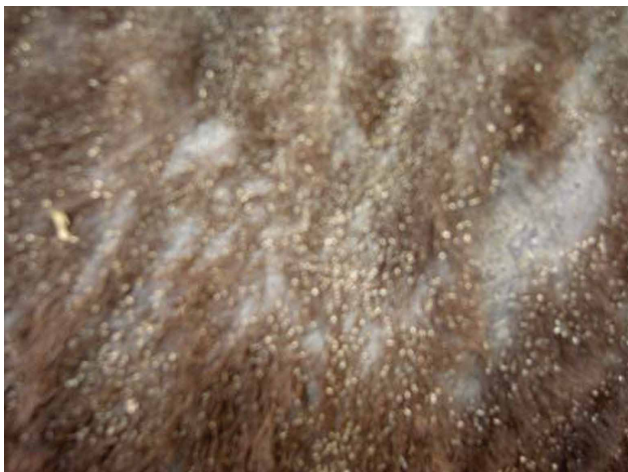
- The animal has lice or lice eggs present in the hair coat.
- There are two types of lice: “sucking lice” that feed on the animal’s blood, and “chewing lice” that feed on dead skin cells<sup>1</sup>. Both adult lice and eggs may be seen, often in the mane, tail and dorsal area; but can be anywhere on the body, particularly if present in large numbers.

### Welfare significance

- Lice are commonly found on animals kept in crowded, dirty environments and therefore can be an indication of other welfare issues or neglect. Animals suffering from infestations of lice often present an unkempt appearance with a thin, patchy hair coat, often with areas of hair loss.
- Very large numbers of lice can drain enough blood to have a detrimental effect on the animal’s health<sup>2</sup>. Blood loss due to parasites can cause weakness and anaemia (reflected in pale mucous membranes).

#### Skin damage

- The irritation caused by the lice can be so severe as to lead to self-mutilation. In these cases the animal will scratch, rub or bite itself to the point of tearing out the hair and damaging the skin. Areas of hair loss can be extensive, and lesions may be created.
- Sunburn can be a complication of large areas of hair loss, particularly in animals with pink or pale coloured skin. This causes pain, and creates blisters and lesions on the burnt skin.
- Animals with lice often have thickened, flaky, scabby skin which is damaged easily and worsened by scratching.
- Abrasions from scratching can cause pain, and if the animal continues to scratch may weep serum and become lesions which are susceptible to local or systemic infection.



Lice eggs and associated hair loss.

<sup>1,2</sup> Hayes (1992)

### Irritation and discomfort

- The irritation (pruritis) caused by lice crawling on the skin can be considerable. The animal may display a restless demeanour, hoof stamping, tail swishing, scratching and biting at affected body parts.
- These behaviours can prevent the animal from being able to rest sufficiently or eat normally, and cause the animal to utilise energy on restless behaviour rather than maintenance, leading to exhaustion and loss of condition.
- Persistent itching will negatively affect psychological welfare, through continual discomfort and distress which cannot be easily relieved.

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### Possible causation

- High animal density (outdoors, indoors, or during transportation) promotes the transfer of lice through body-to-body contact.
- Lice are also capable of surviving away from a host for a period of up to 1-2 days which means they are easily transferred on shared equipment and fixed features such as walls and mangers. Communal rolling areas can also facilitate the spread of lice.
- Poor/infrequent grooming and lack of attention to hygiene means that opportunities to spot and treat lice are missed by the owner.
- Long, shaggy hair coats or long manes provide harbour for lice allowing populations to accumulate.

### Means of resolution

- There are several topical treatments available to treat lice including pyrethroid insecticides (including permethrin), macrocyclic lactones (including ivermectin) and benzyl benzoate<sup>3</sup>. Care should be taken to ensure the correct dose, frequency of application and storage.
- Louse eggs are firmly attached to the animal's hair and can be difficult to remove without pulling out the hair; however, the egg casings should be removed before a de-lousing treatment is applied or the lice will hide in them and escape the treatment.
- Repeated treatments are likely to be necessary to kill lice which hatch after the initial treatment.
- All animals who are housed together should be treated at the same time as it is likely that all animals will be carrying lice even if not showing clinical signs of infestation.
- Regular grooming and inspection of the animal's hair coat will provide the opportunity to spot and treat lice before a widespread infestation can become established.
- Over-stocking (very high density of animals) of grazing areas and indoor housing should be avoided. This will also prevent over-grazing and allow animals sufficient space to move around freely and to rest.

*Refer to the Working Equid Veterinary Manual, Community Engagement work plans or strategies and the Handling Guidelines before conducting an intervention.*

<sup>3</sup> The Brooke (2013)