

Worms in Alpacas

Important things to be aware of:

Variety of worms. Alpacas can carry sheep, cattle and goat parasites. This is important when introducing new animals into the herd (importing parasites) or when grazing alpacas on pasture previously, or currently, used for farming sheep, cattle or goats. Infective worm larvae are very resilient and can survive on the pasture for quite a few months in favourable (cool and moist) weather conditions. Alpacas used as guardians to lambing-ewe flocks can be exposed to heavily contaminated pastures.

Quarantine drenching. When introducing new alpacas to the herd, a quarantine drench should be given on arrival. Hold in a separate yard for 48 hrs before releasing the animal into the herd to allow all worm eggs to be expelled. This can reduce the risk of importing parasites onto your property.

Watch younger animals and older animals under stress. Younger animals (<2 years) are more susceptible to worm burdens. Older animals will develop natural resistance over time. Hembras are more susceptible to parasites when pregnant. They can be placed under stress by birthing, mating and lactating. Nutrition, disease, overcrowding or social stress can also reduce natural immunity in older animals leading to outbreaks.

Beware of stock handling yards. Bringing animals into yards where they are in confined area, such as for shearing or birthing of hembras, can lead to increased risk of infection. If there is some grass/vegetation present, these areas can quickly become havens for large numbers of infective larvae. Once yards are contaminated they can remain so for months.

Be aware of stocking rates. Grazing habits can increase the risk of worm pick up. Alpacas tend to graze in set areas and will continue to graze on regrowth leading to grazing on very low pasture. If stocking rate are too high, this grazing habit can prove to be a problem that leads to increased infection. This is also true if rotational grazing is used with insufficient resting time between rotations.

Latrines - good and bad. Alpacas toiletry habits of using a set latrine usually reduces the risk of infection, however, if over stocked these latrines can be a source of massive concentrations of infective larvae. This is especially true if run off is towards favoured grazing areas.

Control Methods. Currently there are no drenches registered for use in alpacas in Australia. Owners should consult their veterinarian or animal health advisor on control options.

Drench Resistance. Because alpacas can carry sheep, goat and cattle parasites, drench use should be an important management decision. Sheep worm resistance has been well documented with many properties resistant to white (benzimidazole) and clear (levamisole) drench groups. In recent studies it has been found that there is emerging resistance to the ML (macrocyclic lactone) group in certain areas of NSW. Resistance in cattle worms is not well documented and status of resistance is unclear. Owners should be aware of not over drenching and treating only when necessary. Monitoring worm burdens by faecal egg counts can give a useful insight into when drenching is required. Conducting a faecal egg count 10-14 days after drench administration can determine how effective the drench was.

Monitor Worm Burdens. It is important to monitor worm burdens using faecal egg counts at strategic times throughout the year. By doing this you may be able to reduce the number of drenchings required, or only drench those animals with higher worm burdens. Monitoring also allows you to check what species of worms are present on your property so "danger times" can be identified and controlled. Wormtest kits are available from our Laboratory (ph 02 4640 6366). These kits are supplied free of charge. Each kit can test up to 10 animals at a time. Just collect fresh faeces in the vials provided, place in the Wormtest kit, and post in the mail (mailing is reply paid so you don't need to pay for postage). Laboratory charges vary depending on testing required. You and your nominated veterinarian will receive a report within 24 hours of receipt of samples at the laboratory.

Problem worms

When animals are grazing naturally, most internal parasite worm burdens are made up of mixed infections. Some of the more common/problematic parasites are listed below:

- Black Scour Worm - *Trichostrongylus* spp
- Brown Stomach Worm - *Ostertagia* spp
- Cattle Bankrupt Worm - *Cooperia oncophora*
- Barber's Pole Worm - *Haemonchus contortus*
- Liver Fluke - *Fasciola hepatica*

Barber's Pole Worm. Care must be taken when Barber's pole is suspected as this parasite is capable of producing large volumes of eggs in a short period of time which can lead to massive infection. Signs of infection can include anaemia and fluid retention (oedema). This parasite is usually a problem in summer rainfall areas however sporadic outbreaks occur in many regions of NSW.

Liver Fluke. Liver fluke is also a parasite that can be a problem in certain areas. Owners should be aware of regions where liver fluke is a problem in sheep and cattle. In NSW fluke infection is widespread across south-eastern NSW, the Tablelands and their northern, western and eastern slopes, south-eastern coastal areas and also in some irrigated areas. The two primary requirements for liver fluke are a suitable aquatic snail (as the intermediate host) and an environment such as springs, slow-moving streams with marshy banks, irrigation channels and seepages. Care should be taken when introducing alpacas into an area known to be "flukey". Alpacas have little immune response to liver fluke and their liver size is small, so damage can rapidly occur if infected.

Tapeworm (*Monezia*). This parasite has not been proven to have adverse effects in alpacas. Tapeworm segments are often found in the faeces as white flat band like segments (a few cm in length).

Whipworm (*Trichuris*). Whipworm eggs have been found in animals of all ages, but as yet has not been recognised as a disease causing parasite in alpacas. It has proven to be a problem in humped camels in Australia causing diarrhoea and can be hard to treat in these animals.



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