Consultation:
Pain Relief, Castration and Embryo Transfer Policy

PURPOSE: Alpaca growers undertake measures daily to ensure the health and welfare of their animals. It is also incumbent on all supply chain partners to bridge the consumer/producer disconnect. Recent international decisions and have highlighted that the AAA does not have strong scientific based policy positions on some aspects of animal welfare.

AAA members are invited to take part in a consultation meeting to discuss elective husbandry procedures – embryo transfer, pain relief, castration. The meeting will take place on 17 June at 7pm Canberra time.

PAIN RELIEF

BACKGROUND

During painful animal husbandry procedures there may be immediate pain associated with the procedure, as well as slower long-term pain associated with any injury and healing. Veterinarians should be consulted regarding the use of analgesics, including for routine husbandry purposes. Veterinarians may prescribe or supply registered prescription animal remedies as well as veterinary medicines off-label where permitted, to producers with whom they have a bona-fide relationship and where they are familiar with the management practices on the farm.

When prescribing an analgesic for animals under his or her care, a veterinarian must provide adequate directions for use which should be available to all those administering the analgesics. There are currently no approved products on the market that are registered for use in alpaca but there are suitable products that can be used off label.

- Tri-Solfen (Bayer Australia) – local anaesthesia, post-op. Tri-Solfen® is a topically applied combination agent that includes lignocaine, bupivacaine, adrenaline and cetrimide. It was initially registered for treatment of sheep undergoing surgical mulesing, and its use has been extended to include other painful procedures and conditions, in both sheep and cattle. It is applied to wounds, so is a post-operative product for routine animal husbandry procedures. Tri-Solfen contains two local anaesthetics, lignocaine and bupivacaine, which are longer acting and so provide longer analgesia (e.g. 2–4 hours, possibly up to six hours) when applied to a wound. It is an S5 drug so it is available over the counter from major distributors directly to farmers.
- Ilium Buccalgesic OTM (Troy Laboratories, meloxicam) - Buccalgesic® is a meloxicam (NSAID) gel that is administered by oral application in the buccal (cheek) pouch, rather than drenching for the animal to swallow. It is an S4 drug so it has to be purchased from a veterinarian. It should be noted that the label on Buccalgesic reads, “For alleviation of pain associated with the routine husbandry procedure of castration in calves, in conjunction with local anaesthetic at the surgical site”. NSAIDs take 15–30 minutes to take effect, and generally provide pain relief for at least nine hours, but often longer.

PROPOSED POSITION: Farming alpacas can involve elective husbandry procedures including castration, dentistry and some artificial reproduction techniques which have been identified as causing pain and distress.
The AAA promotes the use of appropriate and effective analgesia during potentially painful livestock husbandry procedures.

CASTRATION
BACKGROUND
Castration in Australian alpaca is a routine animal husbandry procedure that results in pain at the time it is performed. Leaving male animals entire is not a pathway for commercial alpaca production. The castration policy has been drafted to take into account:

- state jurisdictional regulations. There are varying regulations regarding castration around Australia. In NSW, SA and Tasmania, castration Is an act of veterinary science and must be performed by a vet. What is reasonable, under some jurisdictions (like Victoria (and WA if alpaca < 12 mo), but not NSW, SA or Tas) is that the local veterinarian can train competent alpaca farmers to administer oral/injectable pain relief, perform hygienic castration, and apply topical pain relief. This this can occur when there is a bona fide relationship between vet and farmer. If farmers have any issues they have a vet on the end of the phone for assistance and do not defer to social media for advice that may be inaccurate. There is anecdotal information that there are some growers ineffectively performing castrations using rubber rings or only removing one testicle, resulting in hemicastrated animals
- There is not an animal welfare standards and guidelines document approved by government to cover alpacas. The Standards and Guidelines for sheep refer to the compulsory use of pain relief for castration of sheep over 6 months of age. (Note that some of the state jurisdictional regulations refer to pain relief for any livestock castration)
- Castration of prepubertal camelids may lead to a delay in the closure of long-bone physes before testosterone production stops and may result in a straight-legged stature in the hind limbs and early-onset degenerative osteoarthritis of the stifle joints in the adult animal, resulting in lameness and pain.

PROPOSED POSITION:
Castration is performed in alpacas to reduce undesirable behaviour such as aggression and mounting behaviour and make males easier to handle.

- The musculoskeletal system of camelids must be sufficiently developed prior to castration to optimise health and welfare.
- Castration is performed in a hygienic and competent manner with the use of pain relief in all cases; by a veterinarian in certain jurisdictions according to legislation.
- Rubber rings (such as Elastrator®) must never be used to castrate camelids as their scrotal anatomy is unsuitable.
- Cryptorchid males must have both testes removed during the same procedure to ensure hemi castrated males are not created.

EMBRYO TRANSFER

BACKGROUND

Embryo transfer offers great advantages to alpaca farmers to reach their breeding goals. It was developed in Australia and is now a well-established commercial technique. Under normal circumstances, a female alpaca is capable of only having one cria annually. Using embryo transfer technology, a top dam can breed multiple times in a single year and have her embryos harvested for transfer into less valuable females.

During embryo transfer, donor females are bred naturally by the male and the embryo that forms following successful fertilisation of the egg by the sperm is harvested from the uterus after one week and transferred into a recipient female. This embryo collection takes place under sedation and is done entirely non-surgically. The recipient female is also sedated for non-surgical transfer of the embryo directly into her uterus. Donor females can be remated and flushed again in subsequent weeks to allow further collection and transfer of embryos.

- Embryo transfer in alpaca requires trans-rectal, manual stabilisation of the cervix to allow insertion of a catheter/pipette into the uterus to perform the appropriate procedure of flushing or transferring embryos/insemination of semen. The technique of grasping the cervix through the rectal wall is challenging because the tissues are fragile, the cervix is small and fragile and the external os of the cervix can be difficult to locate and enter. Dexterity, gentleness, hygiene and caution are essential to perform the procedure, maintain fertility (no damage to cervix or uterus through trauma or infection by inadvertent introduction of bacteria through lack of understanding of microbiology), and maintain general health (no damage to anus or rectal wall from hand, or inadvertent catheterisation of and damage to urethra and/or bladder) of the female.
- The diameter of the anus and rectum of an average alpaca allows a small (glove size <7), well-lubricated, gloved hand to be inserted into the rectum to remove faeces and then manually palpate/manually guide an ultrasound probe to examine abdominal organs. There is little margin for error as the anus is narrow and the rectal wall sits snugly around the hand. Both the anus and rectal wall vary in elasticity and fragility. It is possible to cause anal and/or rectal trauma during insertion of a hand including splitting of the anal sphincter and/or rectal mucosa and/or rupture of the rectum. It is essential that only trained veterinarians perform this technique because they can assess elasticity of tissues to determine if a hand will fit into the anus and rectum in the first place, assess the degree of manipulation possible through the rectal wall, and are able to assess and treat any anal and/or rectal trauma that may during an examination. Lay operators may not have an understanding of anatomy and physiology thus are not trained to handle tissues appropriately, assess variability in elasticity and fragility of the anus and rectal wall (some rectums are too small or have no elasticity and are not suitable for manual palpation), nor are lay operators in a position to assess or treat any trauma that may occur.
- The procedure requires S4 drugs including reproductive hormones, sedative, and reversal agent.
- It is estimated that anal and/or rectal haemorrhage occurs in approximately one in every 20-40 examinations and splitting of the rectal mucosa occurs one in every 100+ examinations. If rectum of an alpaca is ruptured, it requires euthanasia.

- In mid-April, the Joint European alpaca associations (AAA, AAeV, AELAS, AZVD, NWK and ÖAZV) announced a decision that, for ethical reasons and for animal welfare reasons, animals will no longer be included in the registry, herd book and ZEP, which were created from embryo transfer. The animals would also no longer be allowed to enter shows.

PROPOSED POSITION:

- Embryo transfer (ET) has been commercialised in alpacas and allows farmers to increase the number of cria per year from their most valuable stud animals. ET programs should be done under the supervision of a veterinary practitioner. All animals involved in ET programs need to be handled with minimum stress.
- Transrectal palpation in alpacas should only be performed by a registered veterinary practitioner in certain jurisdictions according to legislation.
- Artificial insemination and embryo transfer in alpacas should only be performed by a registered veterinary practitioner (or trained lay practitioner)