Position paper B4 – Painful farm animal husbandry procedures

(adopted 27-11-2021)

The policies and positions of the RSPCA referred to in this document represent the guiding principles to which we aspire in fulfilling our various roles. We are committed to giving effect to these principles wherever possible and practical.

Contents

1 Introduction

1.1 RSPCA Australia defines a painful farm animal husbandry procedure as any action that alters or removes a specific body part of a farm animal and causes pain, suffering or distress. It is reasonable to assume that any procedure that results in live tissue injury will cause pain.

1.2 RSPCA Australia is opposed to farming systems and animal husbandry practices which cause pain, injury, suffering or distress to animals, or which restrict their movements or expression of normal behaviour. RSPCA Australia acknowledges that painful husbandry procedures are routinely carried out across many farming systems. However, the aim for all future farming systems must be to identify and adopt humane husbandry and management practices that do not cause pain, suffering or distress to animals.

1.3 This position paper sets out general principles that underpin the welfare of farm animals undergoing painful procedures and provides guidance on best practice for specific procedures commonly carried out on the major farm animal species in Australia (including cattle, goats, sheep, pigs and poultry) as well as aquaculture species.

1.4 This position paper should be read in conjunction with the following RSPCA policies:

- Good animal welfare
- Policy B - Farm animals
- Policy D1 – Animals in research
- Policy D2 – Genetic manipulation

2 General principles

2.1 Before performing any painful procedure, it must be established that the procedure is necessary for animal welfare reasons (i.e. benefiting the animal or the group of animals involved). Prior to performing a painful procedure, proper consideration must be given to alternative products, treatments, or practices that preclude the need for a painful procedure or eliminate or significantly reduce the pain, suffering and distress caused by the procedure.

2.2 A painful procedure must not be performed where:

- there is a more humane alternative
- there is no established animal welfare need
- the procedure only benefits the human handler of the animals concerned
- it is performed primarily to increase production
- it is performed for cosmetic purposes, or
- it is performed to overcome the adverse effects of the production system on the animals.

2.3 Painful procedures must only be performed by trained and competent operators on healthy animals in good body condition using the least painful, best practice technique and with appropriate pain relief.

2.4 Where farm animal breeding strategies (e.g. the breeding of hornless animals or flystrike-resistant sheep) can replace the on-going need for a painful procedure to be performed, these must be actively implemented. Similarly, where improved herd and/or individual animal management practices (e.g. provision of

appropriate space allowance and environmental enrichment to promote natural behaviours) can replace routine painful procedures, these must be adopted.

2.5 Research into alternatives to painful procedures, including the use of gene technologies, and further research is required into effective pain relief (e.g. for procedures and/or species where it is currently not available as well as longer-lasting pain relief). Any such research must be carried out in accordance with the *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes* to ensure the research is justified, including that the likely impact on the animals has been assessed and procedures are in place for preventing pain, suffering or distress of the animals being used.

3 Training and competency

3.1 All persons handling animals and/or performing painful procedures must be appropriately trained and competent in their required tasks. This includes non-veterinarians legally permitted to carry out painful procedures which are normally considered an act of veterinary science. Competence must comprise the ability to recognise and appropriately address signs of pain, suffering or distress, before, during and after the procedure. Where operator accreditation or certification programs exist for a painful procedure, the operator must also be accredited or certified. For accredited non-veterinarians legally permitted to carry out painful procedures which are normally considered an act of veterinary science, achieving and maintaining accreditation must be subject to regulation.

3.2 Written procedures describing the requirements for humane animal handling and conduct of painful procedures (including identifying and addressing signs of pain, suffering or distress) should be in place and adhered to. Such procedures should include a contingency plan should euthanasia or emergency veterinary care be required. Records should be maintained detailing the person who performed the procedure, the handlers involved, the frequency of post-procedure monitoring, and actions taken to address any problems identified.

3.3 Training and induction records should be maintained and persons performing painful procedures must be assessed by an accredited or competent operator at least annually to ensure on-going competency and best practice technique.

4 Animal handling and restraint

4.1 Animals must be handled calmly and quietly using principles of low-stress handling and with awareness and consideration of the animal's natural flight zone. Juvenile animals in their first weeks of life are often easier to handle than older animals due to their smaller size but must be sufficiently robust to withstand assembly and holding and, where relevant, be returned to their mother following the procedure.

4.2 Before commencing a painful procedure, animals must be restrained in a manner that is appropriate to the age and size of the animal, as well as to the procedure being performed. The method of restraint must avoid pain and minimise distress to the animal and be of the shortest duration possible. Where necessary, operators must allow animals a short period to settle and become accustomed to the restraint before starting the procedure. In some species and in some individual animals where restraint is likely to cause severe distress, sedation must be considered.

4.3 Electro-immobilisation (i.e. temporary paralysis) to prevent voluntary movement is an unacceptable method of restraint as the animal remains fully conscious and sensitive to pain during the painful procedure.

5 Equipment and hygiene

5.1 Equipment used to perform painful procedures must be suitable for the purpose of carrying out the procedure(s) and for the species, age and size of the animal.

5.2 Equipment must be maintained in good working order and kept clean to minimise the risk of infection. Cutting instruments must be sharp and disinfected regularly (at a minimum between each animal). Equipment must be checked immediately prior to use to ensure it is working properly.

5.3 Painful procedures must always be performed in a location that allows for the proper implementation of hygienic practices to minimise the risk of infection. Painful procedures must not be performed in dusty or muddy conditions, during hot or cold weather extremes or during periods of high humidity, rain or wind.

6 Pain mitigation and post-procedure care

6.1 All painful procedures must be accompanied by anaesthesia (to block the pain) and analgesia (to lessen the pain) if available and appropriate to the species and the procedure being performed. In many cases, a combination of local anaesthetic[1], sedative[2] and analgesic[3] will provide the most effective form of pain and stress mitigation for animals undergoing painful procedures. Analgesics must be administered before performing the procedure to allow time for them to be effective.

6.2 If a painful procedure is to be performed, it must be undertaken at the earliest age possible taking into consideration the earliest age at which the young animal can be handled and managed safely to allow the procedure to be performed. Performing painful procedures early in an animal's life reduces the risk of excessive bleeding or infection and facilitates healing. This minimises the potential complications related to carrying out painful procedures on older, larger animals.

6.3 A painful procedure carried out with anaesthesia should only be performed when it has been confirmed that the anaesthetic has taken effect.

6.4 Appropriate post-procedure care must be provided to minimise the risk of pain, bleeding, damage to the wound, or infection. Animals must be monitored following the procedure and, where available, additional analgesics administered where signs of pain or discomfort are evident during the healing process. Further post-procedure care may include restriction of physical activity, use of antiseptic spray/cream, use of insecticide, dressing of wounds, provision of electrolytes, and general monitoring of the animal(s) post procedure.

6.5 Where complications arise following a painful procedure and the animal does not respond to treatment and will not recover, the animal must be competently euthanased in situ without delay.

[1] *Anaesthetic* is defined as a substance that induces temporary loss of sensation or awareness (either general or local) so that the animal does not feel pain.
[2] *Sedative* is defined as a substance that temporarily induces a calming or relaxing effect with the aim of reducing stress. Muscle relaxants are included in this category. A sedative does not block the sensation of pain.
[3] *Analgesic* is defined as a substance that temporarily diminishes, rather than blocks, the sensation of pain.

7 Beak trimming of poultry

Beak trimming is routinely performed on poultry (including layer hens, turkeys and breeder birds) in commercial production systems to avoid, or mitigate, the effects of severe feather pecking. Severe feather pecking is a significant welfare concern due to the pain, fear, stress and injury experienced by the targeted bird and the increased risk of cannibalism and associated mortality in the flock.

Beak trimming involves the removal of the tip of the bird's upper and lower beak, resulting in a blunt or rounded end. Beak trimming is commonly performed on day-old chicks at the hatchery with specialised equipment that uses high intensity infrared energy that causes the tip of the beak to slough off within 3 weeks of treatment. Another method is hot-blade trimming which involves the use of a hot blade that cuts and cauterises the beak tip and may be performed on farm on birds of different ages.

Welfare implications associated with hot-blade beak trimming and incorrect infrared beak treatment include short term and possible long-term pain, stress and impaired function of the beak leading to difficulty eating.

7.1 Reducing the risk of severe feather pecking and subsequent cannibalism should be achieved using options that focus on non-invasive prevention strategies, rather than relying on beak trimming as a routine procedure. These strategies include, but are not limited to:

- the selection for specific traits that reduce the propensity for severe feather pecking
- appropriate rearing conditions that match the environment during lay or grow-out
- house design and housing systems that meet the birds' physiological requirements and behavioural needs
- appropriate management of thermal comfort, air quality, litter condition and lighting within the shed
- appropriate stocking density (sufficient space allowance per bird) within the shed
- environmental complexity including provision of perching and enrichment objects
- appropriate nutrition, including high-fibre diets
- proactive monitoring of feather pecking and aggression, including routine physical assessment and use of benchmarking tools, and appropriate intervention when required
- avoiding sudden changes in diet or environmental conditions and minimising stress and fear throughout the life of the birds
- good stockpersonship.

7.2 Beak trimming must only be performed as a last resort and under veterinary advice where strategies to reduce the risk have failed and there is a high risk of severe feather pecking in a subsequent flock.

7.3 Where beak trimming is considered necessary in a new flock of birds, the procedure must be performed on day-old birds at the hatchery using infrared beak trimming limited to tipping of the beak only. Hot-blade beak trimming, regardless of bird age, should be avoided.

7.4 While beak trimming continues to be routinely practiced, research into appropriate analgesia should be urgently undertaken.

8 Castration

Males of most farm animal species are routinely castrated to prevent unwanted breeding, reduce aggression and sexual behaviour, as well as minimise the risk of injury to the animal, other animals and animal handlers. Castrated males may also produce preferred meat and carcass quality traits compared to non-castrated males.

The main methods of castration are physical (removal or irreversible damage of the blood supply to the testes either by surgical or non-surgical means), hormonal or 'immuno-castration' (disruption of the reproductive hormones) or chemical (intra-testicular injection causing loss of function and subsequent sterility).

Physical methods of castration cause pain, stress and inflammation, and risk infection, bleeding and/or flystrike at the wound site. Chemical castration causes stress and inflammation, however, has a reduced risk of infection and flystrike at the wound site.

8.1 Animals destined for slaughter prior to sexual maturity must not be castrated. Abattoirs should accept non-castrated, prepubescent animals without penalty or downgrade to carcasses of those animals.

8.2 Immunological castration (or 'immunocastration'), where commercially available, effective and practical for use in the production system, must be used in preference to surgical or physical castration. Further development and refinement of immunocastration methods is urgently needed for all species where physical castration continues to be routinely practiced.

8.3 Chemical castration must be shown to be effective and the animal welfare implications appropriately assessed on a species by species basis, before being considered as a suitable alternative to physical castration.

8.4 Selection of appropriate pain relief product(s) and the method of delivery should reflect the castration method used. Surgical methods of castration are the most painful during and immediately following the procedure while the pain from rubber ring castration is more prolonged and wound healing less rapid.

8.5 Physical castration of deer, donkeys, horses and camelids of any age is considered a major surgical procedure and must only be performed by a registered veterinarian using general anaesthetic, or sedative plus local anaesthetic, and analgesics.

8.6 Where castration is considered necessary, it is recommended to castrate juvenile animals in their first weeks of life, as long as the testicles have descended, but not before 1 day of age. Castration of older farm animals is a major surgical procedure and must only be performed by a registered veterinarian.

Cattle, sheep and goats

In southern Australia, most male beef calves are castrated between 1-4 months of age. In northern Australia, male beef calves are generally castrated at an older age. The nature of cattle production in northern Australia, where animals graze on vast, extensive rangelands

with little to no supervision, means that these cattle are not castrated until first muster (yarding) which could occur anywhere up to 12 months of age and sometimes older. Male lambs destined for wool production or those not destined for slaughter prior to sexual maturity are routinely castrated between 1-3 months of age. Male goat kids are castrated at similar ages to lambs.

The main castration methods used are surgical removal (use of a blade or knife) or application of rubber rings. Castration using a burdizzo clamp is uncommon in Australia and, for it to be successful, requires a degree of precision and skill that is difficult to achieve and maintain when castrating large numbers of animals.

8.7 Castration of male calves, lambs and kids using a rubber ring or blade results in both acute and inflammatory pain. The procedure must be accompanied by local anaesthetic, where available, prior administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain in calves include vocalisation, abnormal postures (head down, tail tuck or twitch, arched back, foot stamping, kicking at the underbelly) and reluctance to move or walk. Signs of pain in lambs/kids include abnormal postures (arched back, 'statue standing', splayed legs, kicking or bucking) and increased lying behaviour (including lying on the sternum or side with limbs extended or rolling).

Pigs

In Australia, most pigs are slaughtered prior to reaching sexual maturity and, consequently, are not routinely castrated. In addition to reducing aggressive and sexual behaviours, one of the main reasons for castrating pigs is to prevent the risk of boar taint. As male pigs reach puberty, they start producing andosterone, a male sex hormone, and skatole, a digestive by-product formed in the intestines. The production of andosterone and skatole is responsible for boar taint, which is an offensive smell and taste that becomes evident when cooking and eating pork from entire or non-castrated animals.

Non-physical castration methods (e.g. immunocastration) are commercially available and are effective in reducing the risk of boar taint for pigs that are to be slaughtered upon or after reaching sexual maturity.

8.8 Where it is considered necessary to castrate pigs, immunocastration must be used.

8.9 Castration of male piglets using a blade result in both acute and inflammatory pain and must be avoided. Where it is considered necessary to physically castrate male piglets, the procedure must be accompanied by anaesthetic (general or local), pre-operative administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain in piglets include increased and prolonged vocalisation, reduced nursing, reduced walking, and social isolation.

8.10 Rubber ring castration of piglets must not be performed due to the shape and position of the testes making this method impractical.

8.11 On-going research into genetic selection against boar taint should be maintained and other alternatives to castration, including gene technology or the potential for sexed semen to produce only female offspring, should be investigated.

Induced cryptorchidism

Induced cryptorchidism (also known as 'short scrotum castration' or 'partial scrotal resection') involves applying a rubber ring to the scrotum below the testes, which causes the testes to be held against the abdomen. This increases the testicular temperature which results in the animal becoming infertile while still producing the male hormone testosterone. The technique is used because it results in animals achieving higher growth rates than castrates.

Induced cryptorchidism is not commonly performed in cattle or sheep production systems in Australia.

8.12 Induced cryptorchidism must not be performed as it is painful and offers no benefit to the animal concerned. Induced cryptorchids continue to display masculine behavioural patterns and, because of the constant risk of aggressive encounters, the animals may suffer chronic stress. Cryptorchids require closer management than castrates to ensure that their aggressive behaviour does not result in injury to other animals. Injury to the poll area as a result of aggressive interactions, for example, results in cryptorchids' greater susceptibility to poll flystrike.

9 De-antlering of deer

In male deer, antlers start to grow when the animal reaches puberty. Antlers are naturally cast (or shed) every year in spring and then regrow over a period of several months during which antlers are fully innervated before hardening off. De-antlering of deer is performed to help protect other animals and handlers from injury. However, antlers are also removed in the production of antler velvet which is used for medicinal purposes.

Antlers in velvet are growing antlers with a covering of skin and fine soft hair both of which are rich in nerves and blood supply. Therefore, the removal of growing antlers causes pain and distress. Hard antlers have ceased growing and no longer have a functional nerve and blood supply.

9.1 Castration of deer before they reach puberty and before the pedicle begins to grow out of the head, prevents antler growth and removes the need to de-antler deer later in life.

Antlers in velvet

9.2 RSPCA Australia is opposed to the removal of antlers in velvet for commercial purposes (known as 'velveting').

9.3 Where velveting is conducted, it must only be performed by a registered veterinarian or by a competent operator accredited under the National Velveting Accreditation Scheme and under the supervision of a registered veterinarian.

9.4 Sedation may be required to help calm and restrain deer before administering local anaesthetic to desensitise the antler prior to removal. Local anaesthetic using a ring-block around the base of the pedicle (the bony extension of the frontal bone from which the antlers grow) is the most reliable and commonly used method. General anaesthesia, administered by a registered veterinarian, is also acceptable.

9.5 Antlers must be removed above the pedicle using appropriate means to control blood loss and prevent post-procedure infection and flystrike. Post-procedure analgesia must be administered, and the animals monitored regularly for the first 48 hours, particularly for signs of delayed hypersensitivity to sedation or infection.

Hard antlers

9.6 Due to the calcification and lack of functional nerve and blood supply in hardened antlers, these may be removed or trimmed above the pedicle without the use of anaesthetic or analgesics. However, stags (uncastrated males) at this stage of antler development may be aggressive and difficult to handle. Sedation is advisable.

10 Disbudding, dehorning and horn trimming

Disbudding, dehorning or horn trimming of horned cattle, goats and sheep is routinely performed in many parts of Australia to reduce the incidence of bruising and potential injury to other animals and animal handlers, e.g. during handling, yarding and transport.

Disbudding is the removal of the horn bud before it attaches to the animal's skull. Dehorning is removal of the horn once it has attached to the skull. Horn trimming or tipping is the partial removal of the upper, insensitive part of an animal's horn. The age at which the horn attaches to the skull can vary but it is usually within 2 months for calves and within 2 weeks of age for kids. In Australia, sheep do not generally have their horns removed but rather have them trimmed.

Disbudding methods include thermal cautery or hot iron disbudding (use of heat to destroy the horn bud), chemical disbudding (use of caustic chemicals) and surgical removal (using a scoop dehorner or sharp knife). Dehorning is commonly performed using a dehorning knife, scoop dehorner, guillotine shears, saw or embryotomy wire. Horn trimming is usually performed with embryotomy wire.

Dehorning and disbudding, regardless of the method used, are known to result in pain and stress to the animal, and can additionally impact welfare through risk of bleeding, infection and flystrike.

10.1 RSPCA Australia strongly supports the breeding of polled (hornless) animals to preclude the need for disbudding, dehorning or horn trimming. The polled gene is a dominant trait and progeny who inherit the polled gene will be hornless and not require disbudding or dehorning.

10.2 Where disbudding is considered necessary, juvenile animals must be disbudded before the horn buds attach to the skull. Dehorning of older farm animals is considered a major surgical procedure and must only be performed by a registered veterinarian.

10.3 Where there is a lack of polled genetics, poll gene-testing technology or availability of polled animals and where disbudding, dehorning, or horn trimming is considered necessary for the welfare of the animals in the production system:

- disbudding must be performed in preference to dehorning
- horn trimming or tipping must be practiced in preference to dehorning of older animals.

10.4 Trimming or tipping the upper, insensitive part of the horn is acceptable and does not require the use of anaesthetic or analgesics. Horn trimming may be required where the horn is overgrown or risks penetrating the animal's eye or skull. Depending on the animal, sedation may be recommended to reduce fear and stress during the procedure.

10.5 Continued reliance on dehorning is unacceptable when more humane alternatives such as breeding polled animals and, in the interim, disbudding, are available.

10.6 Pre-procedure pain relief in the form of anaesthetic and analgesics must be administered for disbudding and dehorning of all animals, regardless of the method used and age of the animal. In many cases, sedation is also recommended.

10.7 It is unacceptable to disbud or dehorn an animal using tools such as axes, chain saws and hammers or using caustic chemicals. The latter risks damaging the surrounding skin, eyes and face of the animal and potential transfer of harmful chemicals to other animals (e.g. licking or physical contact with the wound). The chemical may cause irritation and there is evidence that this method causes long-term pain in some species. Tools such as axes, chain saws and hammers cannot be accurately positioned causing excessive damage to the frontal sinuses and underlying cranium (skull) which protect the animal's brain, resulting in large, painful wounds.

10.8 High tension rubber bands must not be used to dehorn animals due to the sustained pain and discomfort experienced following application of the bands evidenced by reluctance to move, abnormal/stiff gait, hunched posture and increased lying behaviour.

Cattle

In southern Australia, most beef calves are polled *Bos taurus* breeds. In contrast, in northern Australia, beef calves are generally horned *Bos indicus* breeds or crossbreeds better adjusted to tropical climates. Some *Bos indicus* breeds have individuals who are hornless. The nature of cattle production in northern Australia, where animals graze on vast, extensive rangelands with little to no supervision, means that these cattle are not dehorned until first muster (yarding) which could occur anywhere up to 12 months of age and sometimes older. The main dehorning methods for beef cattle are scoop dehorner or use of a dehorning knife.

Dairy breeds are mainly horned breeds and most replacement heifers (female calves) are disbudded before 2 months of age with the remainder being dehorned at an older age. Cautery disbudding using a hot iron is a common disbudding method in dairy calves.

10.9 Breeding animals (bulls and cows) should be polled and, where bull semen is used, bulls should be tested to ensure they are homozygous polled bulls. By introducing polled genetics into a horned or mixed herd, the number of progeny requiring horn removal is gradually reduced.

10.10 Where disbudding of calves is considered necessary, thermal cautery (hot iron) is the preferred method as it reduces the risk of bleeding and may also limit infection, flystrike and mortality. Care is needed to minimise risk of thermal injury to the underlying bone and tissue surrounding the horn buds.

10.11 Disbudding of calves results in both acute and longer-lasting (inflammatory) pain. The procedure must be accompanied by pre-procedure local anaesthetic at the base of each horn bud, pre-procedure administration of analgesics and on-going

administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain following disbudding in calves include vocalisation, ear flicking and head shaking and rubbing.

10.12 For dairy calves, and other calves who can be closely supervised following the procedure, sedation is also recommended.

Sheep

10.13 Disbudding or dehorning of sheep is an unnecessary procedure and must not be performed. Horn trimming is an effective means of managing horns in both sheep meat and wool production systems. Depending on the animal, sedation may be required.

Goats

Compared to calves, the skull of kids is much thinner and the horn bud lies shallower and is more diffuse. If excessive pressure or prolonged heat is applied when using the thermal cautery method, there is an increased risk of damaging the skull and brain. There are also risks associated with the administration of anaesthetic to kids due to their small size and young age (neonates) at the time of the procedure. There is some evidence that local anaesthetic is ineffective at mitigating pain response in kids at the time of thermal cautery disbudding (the most common method used) and there is a known risk of anaesthesia toxicity or overdose. Caustic paste disbudding causes more pain and more tissue damage than the thermal cautery method.

The use of polled (hornless) genetics eliminates the animal welfare and health issues with disbudding or dehorning in cattle. In goats, the polled gene (a dominant trait) is linked to a recessive gene that, when breeding hornless animals, results in the homozygous polled progeny acquiring both male and female characteristics making them infertile. Early research has suggested the relationship is more complex and further research is required to understand how the poll and infertility traits could be uncoupled to allow for successful breeding of polled goats.

10.14 Disbudding of goat kids is not recommended due to the risks associated with the procedure. In addition, the risk of injury to other animals and people from horned animals is relatively low and can be managed by horn trimming. Alternatives to thermal cautery (hot iron) disbudding, should be investigated including research to progress the breeding of polled goats without producing infertile progeny.

10.15 Where disbudding of kids is considered necessary, it must be done within the first week of life. Thermal cautery (hot iron) is the preferred method and extreme care must be exercised to avoid skull damage and thermal injury to the brain by applying the iron no longer than 5 seconds on each bud.

10.16 Disbudding of kids results in both acute and inflammatory pain. The procedure must be accompanied by local anaesthetic at the base of each horn bud, pre-procedure administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain following disbudding in kids include head and body shaking, head scratching and head rubbing.

10.17 For kids who can be closely supervised following the procedure, sedation is also recommended.

10.18 Horn trimming is an effective means of managing horns in adult goats. Depending on the animal, sedation may be required.

11 Eyestalk ablation in farmed crustaceans

The removal of eyestalks is carried out in some crustacean farming systems to promote ovulation (production of eggs) in female brood stock. The procedure can be carried out on prawns, mud crabs and lobsters. Either one or both eyestalks are removed using cauterisation (e.g. with hot forceps) or ligation (tying off with surgical thread) at the base of the eyestalk. Another method involves slicing the eye open and squeezing out the contents. A gland in the eyestalk secretes a hormone which can slow the growth of eggs in female brood stock. Removing the eyestalks, stimulates ovulation and release of fertile eggs (spawning) thereby allowing reliable production planning at the hatchery. Eye ablated females spawn more frequently and thus lay more eggs than intact females.

Eyestalk removal is painful with signs of pain in prawns including tail flicking, rubbing the affected area, disorientation and erratic swimming behaviour.

11.1 Eyestalk ablation must not be performed as it is painful and conducted to increase production while offering no benefit to the animal concerned.

12 Identification – branding, ear notching/marking and fin clipping

Branding is a form of permanent identification which involves the use of a hot iron or a freezing technique to destroy hair follicles on an area of the animal's skin. Branding of dairy cattle is common as is branding of beef cattle, particularly in northern Australia. Both hot iron and freeze branding cause pain and discomfort, with the hot iron method being acutely painful at the time of branding. Hot-iron branded animals are more likely to show signs of pain, e.g. vocalisation, falling, kicking and tail flicking, at the time of application than freeze branded animals.

Ear notching or ear marking is the practice of removing small sections of the outer ear(s) for the purpose of permanent identification of a range of farm animal species including pigs, cattle, sheep and goats. Specially designed notching pliers are used to cut a shape (earmark) in one or both of the animal's outer ears. Ear notching is an acutely painful procedure.

Fin clipping is the removal of the adipose fin using surgical scissors or an automatic cutter and is carried out for identification purposes, e.g. to identify certain brood stock in aquaculture (fish farming) systems. The adipose fin sits just in front of the tail and, unlike other fins, it lacks bone and muscle and does not grow back once removed. Removal of the adipose fin is painful as the fin is innervated. In addition, since the fin appears to act as a flow sensor, its removal can be detrimental to the fish's ability to swim efficiently, particularly in turbulent water. A common alternative to fin clipping is tagging, however, tags can attract predators, also interfere with locomotion and make the fish susceptible to infection of wounds at the tag site.

12.1 RSPCA Australia is opposed to hot-iron branding. Where branding of animals is required, freeze branding on a site that avoids sensitive areas is the preferred method. Electronic identification technology, including electronic ear tags, must urgently replace the requirement for branding. Freeze branding must be

accompanied by prior administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident.

12.2 RSPCA Australia is opposed to ear notching. Where visual identification of animals is required, ear tagging (e.g. using electronic identification technology) is acceptable. Ear tagging must be accompanied by prior administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident.

12.3 Fin clipping is not recommended. Where fin clipping is considered necessary, it must only be carried out on anaesthetised fish. On-going research into alternatives to fin clipping and their effects on fish welfare should be maintained. More humane alternatives must be adopted when available.

13 Laparoscopic artificial insemination and embryo transfer in sheep

Laparoscopic artificial insemination is an invasive surgical procedure performed on small ruminants such as sheep and goats. The procedure is mainly carried out by stud breeders with the aim of breeding a larger number of stud rams than would be possible through natural mating as well as improving the genetic merit of progeny, i.e. the ram having the production characteristics (e.g. wool or meat quality traits) the sheep producer is seeking to pass on to their commercial flock. The procedure involves penetration of the abdominal cavity and deposition of semen directly into the uterine horn(s) of a female in oestrous. Gas (e.g. CO_2 or air) is inserted into the abdominal cavity through a second incision to inflate the abdomen and improve visibility of the reproductive tract. The procedure is performed in preference to other artificial insemination techniques (vaginal or trans-cervical) as it is more efficient in terms of semen use and results in higher pregnancy rates. However, it is more invasive and requires specialised equipment and a high level of surgical expertise.

Embryo transfer is carried out as a means of producing a greater number of genetically improved progeny than can be achieved through conventional breeding in small ruminants such as sheep and goats. Embryo transfer involves the collection and transfer of embryos from genetically superior donor ewes/does to recipient ewes/does. Embryo collection is commonly performed using surgical (laparotomy or laparoscopy) methods. The surgical methods require penetration of the abdominal cavity and flushing of the oviducts. The collected embryos are then transferred to recipient ewes/does by laparotomy or laparoscopic technique which also requires penetration of the abdominal cavity. Non-surgical (transcervical) methods are emerging but, unlike in cattle or goats, transcervical techniques pose challenges in sheep due to the anatomy of the cervix making it difficult to pass a catheter through.

Penetration of the abdominal cavity causes pain and both surgical and non-surgical methods result in inflammation (caused by tissue damage) and distress.

13.1 Where reproductive technologies such as laparoscopic insemination and embryo transfer are performed, their primary aim should be the more rapid achievement of polled genetics or other significant animal welfare improvements.

13.2 Where laparoscopic insemination or embryo transfer is considered necessary, it must only be performed by a registered veterinarian trained in the technique and using adequate anaesthesia, analgesia and sedation.

13.3 Sufficient time must be allowed to perform the procedure in order to minimise stress and discomfort. However surgical speed and efficiency is also a critical component of reducing the risk of complications.

13.4 Laparoscopic insemination or embryo transfer must not be performed routinely on the same animal and each animal must be physically examined to ensure they are healthy and not pregnant.

13.5 Synchronisation of oestrous of animals undergoing the procedure must be under the supervision of a registered veterinarian.

13.6 On-going research into alternatives to surgical reproductive technologies and their effects on animal welfare should be maintained. More humane alternatives must be adopted when available.

14 Mulesing of sheep

Mulesing is the use of shears to surgically remove wool-bearing skin from part of the tail and breech area (upper hindquarters) of sheep used for wool production and is performed to reduce the incidence of flystrike in the breech area. Flystrike occurs when female blowflies lay eggs in woolly wrinkles and skinfolds and the maggots that hatch then feed on the animal's flesh. When the mulesing wound heals, it creates an area of bare, stretched scar tissue which has no folds or wrinkles and is less likely to attract blowflies as there is less opportunity for faeces and urine to accumulate. Mulesing results in significant pain, distress and discomfort for the sheep.

Although a number of alternatives to mulesing have been developed in recent years, none have been widely adopted and/or been proven to be commercially viable. Many of these alternatives still involve modification of the breech area by physical or chemical means and cause pain and suffering.

14.1 Breeding sheep that are resistant to flystrike combined with enhanced on-farm sheep management practices is the alternative to mulesing. It is unacceptable to continue to breed sheep that are highly susceptible to flystrike and, therefore, require mulesing or other painful procedure to manage the risk of flystrike.

14.2 The wool industry should continue to invest research, development and extension effort into a comprehensive flystrike-resistant sheep-breeding program. On-farm extension to facilitate the rapid adoption of breeding solutions must be a priority.

14.3 Mulesing must be considered a measure of last resort and only when it forms part of an integrated approach to the prevention and control of flystrike in circumstances where a flystrike-resistant sheep breeding and selection program is in place. In addition, mulesing must only be performed where it is known that the procedure will reduce the incidence of flystrike in a particular geographic location.

14.4 Where mulesing is considered necessary, it must be carried out on lambs between 2 to 8 weeks of age, accompanied by anaesthetic, pre-procedure administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain in lambs include hunched standing and less time lying and eating.

14.5 Radical mulesing, in which all skin is removed from the tail and the incisions of the tail and breech areas join so that no wool grows between them, must never be

performed as it causes significant pain and suffering and exposes the area to sunburn which increases the risk of cancer.

14.6 Lambs sold at an early age for meat must not be mulesed.

15 Nose ringing

Nose ringing involves inserting a ring in the nose or nasal septum (cartilage between the nostrils) of the animal. In cattle, nose rings are used to assist with management and control of large animals (mainly bulls) and the safety of their handlers. In calves, weaning nose rings may be used as an anti-suckling device to facilitate weaning. Pigs reared outdoors may be nose ringed to prevent rooting behaviour and associated damage to the environment.

As the procedure is commonly performed without anaesthesia, piercing of the nose or septum causes pain.

Cattle

15.1 The proper use of a removable show lead as an alternative to the nose ring is recommended for the purpose of controlling bulls as, once removed, it allows the animal freedom of movement thereby significantly reducing the risk of injury.

15.2 Where nose ringing for the purpose of controlling bulls is considered necessary, the procedure must be performed by a registered veterinarian with the use of a local anaesthetic, pre-procedure analgesics and, if necessary, a sedative. Administration of analgesics must continue for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain in cattle include standing with arched back and head and ears lowered, head shaking and head throwing. Ring size must be appropriate for the size of the animal and may need to be replaced as the animal grows. The ring must be smooth and well-fitting and must not inflict pain. The nose ring must not be used until the septum has healed.

15.3 The nose ring alone must never be used to restrain or pull the animal along. A suitable head halter should be used to lead the animal, while the nose ring should only be used to provide added control.

15.4 Weaning nose rings must not be used. Weaning nose rings do not penetrate the septum, but still have the potential to impact the welfare of both calf and cow. Calves may become frustrated by the inability to suckle and are at risk of being kicked by the cow because of the device causing pain or discomfort around her udder. More gradual weaning practices such as fence weaning or yard weaning should be used.

Pigs

15.5 Pigs must not be nose ringed as the ring unreasonably restricts their normal behavioural patterns, including rooting and foraging.

15.6 Appropriate management and rotation of outdoor areas will assist in maintaining the outdoor environment and minimising degradation. Pigs must be provided with alternative substrate to allow foraging behaviour while at the same time preventing adverse effects on the environment.

16 Spaying of cattle

Spaying of female cattle is performed to avoid unwanted pregnancy of animals, often in extensive pastoral areas (rangelands) where females are not segregated from males. Spayed cattle are less likely to lose weight (or starve), particularly under variable seasonal conditions, and spaying heifers (female cattle who have not given birth) reduces the incidence of calving difficulty and subsequent death. The two main methods of spaying cattle are flank laparotomy and the Willis dropped ovary technique. In a flank laparotomy, the ovaries are surgically removed through an incision in the flank or, alternatively, a portion of the oviduct (fallopian tube) is removed from each side in a process known as 'webbing'. The Willis dropped ovary technique involves cutting the ovaries away from their attachments in the abdomen through the vagina.

Flank spaying has been associated with longer-term pain and higher morbidity and mortality when compared to the Willis dropped ovary technique. Spaying heifers rather than cows reduces the welfare impact, with pain in cows found to be more severe and sustained.

16.1 Improved land and herd management practices to manage animal nutrition as well as planned bull management to avoid the need for spaying should be implemented. Until such time, RSPCA Australia advocates the development of inexpensive and easily applied hormonal implants to control pregnancy of animals in extensive pastoral areas.

16.2 It is unacceptable to use flank spaying or webbing (removal of the fallopian tubes) as a method to control pregnancy.

16.3 Where spaying is considered necessary, the Willis dropped ovary technique is the preferred method and must only be performed on non-pregnant heifers by a registered veterinarian or accredited non-veterinarian trained in the technique. The procedure requires epidural anaesthesia and must be accompanied by pre-procedure administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain in heifers include standing with head down, arched back, stiff tail, increased lying and reduced eating.

16.4 Post-procedure monitoring and care must be implemented for a period of at least two weeks after the procedure to minimise the possibility of complications and allow for timely intervention should complications arise.

17 Tail docking

Tail docking is the removal of part, often the majority, of an animal's tail and is commonly performed in sheep and pigs as well as in some dairy cattle. The method used and reasons for performing the procedure vary depending on the species.

Tail docking is painful and can lead to chronic pain and hypersensitivity of the tail region.

17.1 Tail docking must only be carried out under veterinary advice and where the procedure is performed to improve an individual animal's health and welfare.

17.2 Where tail docking is considered necessary, the procedure must be accompanied by anaesthetic where available, prior administration of analgesics and on-going

administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident.

Cattle

Some dairy farmers believe tail docking improves cleanliness around the udder thereby reducing the risk of mastitis and improving milk hygiene and quality. There is no scientific evidence to support these claims. Tail docking may also be performed to improve conditions for stockpersons working with the animals. However, switch trimming (cutting the long hair at the end of the tail) achieves the same outcome. Tail docking of dairy cows can be performed using a rubber ring, sharp knife, or cauterising docking iron.

17.3 Tail docking of dairy cows must not be performed. Switch trimming of dairy cows is an effective alternative means of preventing the problems associated with dirty tails.

Sheep

The main reason for tail docking sheep is to reduce the risk of flystrike by minimising the opportunity for urine and faecal soiling of the breech area. Tail docking is routinely performed on young lambs using a rubber ring, sharp knife, or docking iron.

17.4 Tail docking of lambs must only be carried out when part of a planned strategy to reduce the incidence of flystrike in the breech area of wool-producing sheep. Sheep who are resistant to flystrike must not be tail docked.

17.5 Lambs killed at an early age, e.g. for meat production, before flystrike is a potential problem, must not be tail docked.

17.6 Where tail docking of lambs is considered necessary, the procedure must be performed on juvenile lambs in their first weeks of life. The procedure must be accompanied by anaesthetic, prior administration of analgesics and on-going administration of analgesics for the period where post-procedure pain is expected and where signs of pain and discomfort are evident. Signs of pain in lambs include head turning, foot stamping, restlessness, statue standing, rolling and writhing, and lying on their side.

17.7 The length of the docked tail must at least cover the vulva in female lambs and the anus in male lambs.

17.8 Tail docking of older lambs must only be performed by a registered veterinarian.

17.9 Some sheep have naturally short tails presenting an opportunity to adopt and further investigate breeding technologies that select for short tails, thereby removing the need for tail docking.

Pigs

Most piglets raised in intensive housing systems will have their tail docked within the first few days of birth. The main reason for tail docking piglets is to prevent and minimise the impact of tail biting, an abnormal behaviour whereby pigs bite the tails of other pigs. However, tail docking does not address the underlying causes of tail biting which are

related to a barren environment and the inability to perform exploratory and foraging behaviours. Both tail biting and tail docking are major animal welfare concerns. Commonly used methods for tail docking pigs include use of side pliers, knife, surgical scissors, or hot docking iron.

17.10 Tail docking of piglets must not be performed. The procedure itself is painful and piglets show behavioural signs of pain post procedure even when anaesthetic and analgesics have been provided.

17.11 The use of non-invasive prevention strategies to mitigate and control tail biting will reduce the need to tail dock piglets. These strategies include, but are not limited to:

- provision of appropriate environmental enrichment that satisfies the pig's motivation to perform exploratory, foraging and rooting behaviours
- good stockpersonship and low-stress handling
- close monitoring to allow early identification of abnormal behaviour and appropriate intervention
- maintaining optimal environmental conditions including management of stocking density, heard health, air quality and provision of feed and water
- selection and breeding of animals with lower genetic propensity to tail bite.

18 Teat clipping

Some livestock species, including dairy calves and dairy goat kids, are commonly born with extra teats on the udder called supernumerary teats. These extra teats are non-functional and not harmful but they can affect milking efficiency or increase the risk of infection and the development of mastitis in functional teats, especially if the extra teat is connected to the mammary gland. In the dairy industry, supernumerary teats are usually removed using surgical scissors.

18.1 Where it is necessary to remove supernumerary teats for therapeutic reasons, the procedure must take place before the animal is 3 months of age. An effective local anaesthetic and pre-procedure administration of analgesics is required, the area should be disinfected and any bleeding that occurs following the removal of the supernumerary teat with clean, sharp surgical scissors should be controlled.

18.2 Removal of supernumerary teats on animals over 3 months of age should be avoided. However, where it is considered necessary or where a supernumerary teat is conjoined to a major teat (webbed teats), the procedure must only be performed by a registered veterinarian using an appropriate sedative, local anaesthetic and analgesic.

18.3 Supernumerary traits are highly heritable and selection against supernumerary teats should be included in herd breeding programs with the aim to reduce the prevalence of the condition and thus the need to perform the procedure.

19 Teeth clipping, grinding or trimming

Sheep

Teeth grinding, trimming or clipping in sheep was traditionally undertaken as shortening and evening out of the incisor teeth was thought to improve productivity by allowing sheep to graze more effectively for longer. Scientific evidence does not support these claims.

19.3 Teeth grinding, trimming or clipping in sheep must not be performed as it causes significant pain and distress and there is the potential for suffering chronic pain post procedure.

Pigs

Teeth clipping or teeth grinding in pigs is the removal of the sharp tip of a piglet's canines and third incisor teeth (referred to as 'needle teeth'). The procedure is performed to minimise the risk of damage to the sow's udder and injury to litter mates. There is an associated risk of injury, infection and stress on the piglet as a result of the procedure. The procedure is painful causing short-term and sometimes long-term tooth pain. Commonly used methods include the use of clippers, side cutters or grinding.

19.1 Teeth grinding and teeth clipping of piglets' needle teeth must not be performed.

19.2 Husbandry and management procedures aimed at minimising aggression between piglets should be implemented. These may include the maintenance of regular feeding regimes, provision of environmental enrichment and sufficient space, avoiding large litter sizes, frequent observation and assessment of each litter, and selective breeding of less aggressive individuals and breeds.

20 Toe trimming and other painful procedures in farmed birds

Toe trimming (also known as toe clipping), spur removal, desnooding, pinioning and wing clipping are procedures that may be carried out on farmed birds. Toe trimming or 'declawing' (amputation of the bony tip of the three forward facing toes to remove the sharp claw) and spur removal are performed to reduce the risk of the bird scratching and injuring others in the flock. Toe trimming is performed on male turkey breeder birds to avoid injury to hens during mating. Toe trimming is also performed on emus to minimise damage to their skin. In turkeys, the snood (fleshy appendage on the top of the head) is often removed as it is a likely target for injurious or aggressive pecking from other birds. Pinioning (includes de-winging, notching or tendon severing and involves mutilation of the wing tissue) or wing clipping (trimming of the primary flight feathers) are performed to prevent or restrict flight behaviour and the impact of flightiness in farmed birds.

Depending on the alteration and method used to perform the procedure, these procedures can cause short-term and long-term pain and restrict the birds' ability to display normal behaviours.

20.1 Toe trimming, spur removal, desnooding or pinioning must not be performed.

20.2 Where there is an identified risk of injury due to scratching or pecking, environmental, managerial and/or genetic improvements must be implemented to mitigate the risks rather than reliance on painful procedures. Mitigation measures include, but are not limited to:

- designing housing systems that allow natural behaviours to be expressed
- providing adequate space and visual barriers so birds can escape aggressive encounters and seek refuge
- avoiding unnecessary mixing of unfamiliar birds
- avoiding competition for feed and other resources
- providing options for claw shortening, e.g. abrasive floor areas
- improving handling to avoid stress.

21 Tusk trimming of boars

Tusk trimming of boars is carried out to protect other animals from injury and to improve safe handling practices. A boar's tusks may be trimmed prior to transport, when mixing in unfamiliar groups, or when the animal is used as a 'teaser' boar or for artificial insemination (when there is an increased risk of injury or aggressive behaviour). The procedure is not performed on male grower pigs as they are slaughtered prior to the development of the tusks. Tusks are generally trimmed close to the gum line without the use of pain relief or sedation. When the procedure is performed correctly, no anaesthetic is required as the tusk (excluding the pulp chamber) lacks sensory nerves.

21.1 Tusk trimming must only be performed by a registered veterinarian with the boar under heavy sedation. No anaesthetic is required as the tusk lacks sensory nerves.

21.2 An acceptable method of tusk trimming is using embryotomy wire leaving at least 2cm of tusk above the gum line. Appropriate precautions must be applied to avoid damage to surrounding tissue and prevent post-procedure infection. Post-procedure analgesics and infection control must be provided where there is any impact on the surrounding tissue.

21.3 Good management practices such as avoiding the mixing of unfamiliar boars and selection for boar temperament to reduce aggression is strongly encouraged to minimise the need for tusk trimming and to prevent the associated stress of handling and any risk of complications.