Global Federation of Animal Sanctuaries

Standards For Domestic Ruminant and Camelid Sanctuaries

Version:

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INTRODUCTION

The Global Federation of Animal Sanctuaries (GFAS) will designate an organization as "verified" or "accredited" based upon its substantial compliance with the standards listed below.

GFAS notes that there may be other acceptable ways of meeting the intent of each standard, aside from those detailed below, and that in some instances there may be legal, cultural or other significant barriers to meeting GFAS requirements.

The standards are considered mandatory, but GFAS will consider specific exceptions to some of the listed requirements (e.g., manner of record keeping, legal requirements that impact a sanctuary's acquisition policy, etc.). GFAS encourages sanctuaries to offer feedback on the standards and to explain any reasons why it believes it cannot meet a particular standard, or why the standard is not applicable and/or appropriate to its situation. Sanctuaries are also welcome to indicate a timeline for meeting a standard if the standard is not yet met at the time of application for Accreditation or for Verification.

The exceeding of the standards is encouraged. In addition to meeting these standards, an organization is expected to comply with all applicable international, national, state/province, and local laws and regulations.

Some standards refer to written documents that a sanctuary should have. A list of required documents for GFAS Accreditation and Verification, with the corresponding standard, can be found on the GFAS website at https://www.sanctuaryfederation.org/accreditation/how-to-apply/application-documents/.

Definitions

Sanctuary. GFAS recognizes that some organizations operate valid rescue and rehabilitation programs with a goal of releasing wildlife to the wild pursuant to IUCN and/or other international or national standards. For those animals, lifetime sanctuary care may not be part of the organization's mission. While the care for these animals may be provided on an interim basis only, the organization is still expected to meet the standards below with regard to all animals in its care and for purposes of these standards it will be identified as a "sanctuary."

Director. Several standards make reference to a sanctuary's "Director." GFAS recognizes that a sanctuary may use a different title, and the term "Director" is intended to reference the sanctuary's Sanctuary Director, who may be called an Executive Director or Chief Executive Officer, etc.

Personnel. GFAS also recognizes that sanctuaries may rely on volunteers for certain functions, including some aspects of animal care (such as food preparation). Standards referencing "personnel" may take into account appropriately qualified and trained volunteers as well as employees.

Adoptions. Adoption is a process whereby legal ownership of an animal is transferred from a rescue or sanctuary organization to a new home.

Foster Care Placements. Foster care placements are a process whereby legal ownership of an animal is not transferred, but the responsibilities of the rescue/sanctuary and the foster placement are specified.

ANIMALS COVERED BY THESE STANDARDS

1. Family / Genus / Common Names

a. Family: *Bovidae, Camelidae*

b. Genus: *Bos, Camelus, Capra, Lama, Ovis, Vicugna*

c. Common names: Alpaca, Camel, Cattle, Goat, Llama, Sheep

Version Updates:

New and amended content released May, 2023

- V-4 Quarantine and Isolation Care and Facilities – addition of one bullet point to require posting of visible signage

New and Updated March 2021

New and Updated April 2020

New and Updated content released on February 2015

- G-1 Nonprofit/Non-Commercial Status
- P-3 Disposition Ethics and Responsibility
- P-4 Disposition of Live Ruminants
- P-6 Euthanasia

New and Changed content released on July 2015

- V-7 Breeding/Contraception – section a.

RUMINANT/CAMELID HOUSING

H-1 Housing

Animals are safely contained. Unless otherwise directed by a veterinarian, and for a specified medical reason, animals are provided sufficient opportunity to move about freely and rapidly, and to exercise choice in location so as to maintain positive welfare.

General

- The habitat and living conditions provide a balance between hygiene and the animals' physiological and psychological needs. This includes consideration of indoor and outdoor space, vertical and horizontal space, and diversity and complexity of space.
- Policies and procedures are in place such that personnel can enter enclosures without risk of having animals escape and, if necessary, can shift animals as appropriate out of enclosures prior to entering the enclosure. Facility design takes into account caregiver-animal safety and ease of maintaining a positive relationship.
- Animals are provided access to as many areas of the enclosures as possible at all times, except during personnel maintenance activities, unless security or welfare concerns dictate otherwise. All enclosures are constructed without creating 'dead ends' to allow for freedom of movement of subordinate individuals.
- In areas where solid barriers are not used, equipment, *e.g.* machinery and heaters placed outside the enclosure, is positioned far enough away from the enclosure that the animals cannot access it.
- The habitat provides appropriate visual and acoustic barriers.
- The habitat provides security from predators and unauthorized human access.
- Outdoor enclosures have enough acreage per animal to accommodate natural individual and group behaviors/ activities.
- Quarantine facilities have appropriate housing for treatment of injured or ill animals. Healthy animals admitted to quarantine have as large an enclosure as possible to help maintain natural locomotion and behaviors.
- Enclosure is designed to allow all animals with physical limitations easy access to water, feed sources and shelters.
- For sanctuaries located in climates where freezing temperatures occur during any part of the year, indoor space is large enough to allow for key species-specific behavior (running, climbing, etc.). Distance or barriers between animals and between enclosures and personnel is sufficient to minimize stress to the animals as well as reduce the risk of disease transmission.
- Enclosures are designed to allow for proper, safe cleaning and drainage.
- A regular program of sanctuary maintenance is in place. Any enclosure in need of repair, or any defect likely to cause harm to animals, is immediately repaired or replaced, or the animals are relocated to a secure enclosure.
- Safety signs on any electrified sections of the perimeter fences or enclosures are easily visible.

H-2 Ground and Plantings

Ground surfaces indoors and out are healthy for ruminants/camelids. Plantings are appropriate and safe.

Vegetation

- All plant materials in an enclosure are evaluated for potential toxicity to the animals before use, including leaves, buds, seeds, fruit, bark and flowers.
- Any vegetation capable of harming animals is kept out of reach.
- Trees:
  - Shade trees within an outdoor enclosure are protected from damage.
  - Trees, vines and shrubs that may be used as an escape route are pruned or removed, or means to prevent animals from accessing them have been implemented.
  - Trees close to fence lines are checked regularly and any removed if needed.
  - Trees within or near animal enclosures are regularly inspected, trimmed or felled as necessary to avoid animals being harmed by falling branches, toxicity, or trauma.
- Where possible, natural pasture or woodland is available to provide ruminants/camelids with grazing and browsing opportunities and natural resting surfaces.
  - Browse is provided where animals do not have access to natural browse, as species appropriate.
- Pasture available to animals should be safe and appropriate.

Preferred Practice:

- ✓ Pasture rotation allows pasture to rest and regenerate as animals graze while also minimizing parasite load in soil.

Outdoor Enclosure Ground

- All outdoor enclosures have a natural substrate consistent with the site and the needs of the species, and which drains well. For optimal health, no ruminant/camelid species should stand primarily in mud.
- The substrate provides easy to clean, dry areas for feeding, standing and resting away from wet areas.
  - Camelids are not maintained on wet or boggy ground, nor on hard abrasive surfaces which may result in injury to footpads or kneeling pads.
  - The substrate can be amended with organic materials, including but not limited to soils, sand, bark mulch, leaf litter, grasses, straw and hay.
  - When possible, sand is not used as substrate for feeding areas to reduce risk of sand impaction.
- Outdoor areas should be regularly monitored and checked for foreign objects, to address hardware disease concerns in resident animals.

- Animals are provided with appropriate three-dimensional environments to accommodate an array of natural behaviors. Horizontal and vertical jump distance is considered when developing enclosure topography.
- Where natural topography of an enclosure is not varied, it is created through the addition of natural and placed elements.
- In cold, icy climates, enclosures are regularly monitored for ice patches that can cause slips/falls for animals, especially large species such as cattle. Such conditions can lead to dangerous connective tissue/joint injuries if accidents occur. Access to these areas is limited until ice can be remedied. If ice melt is used it should be contact safe for enclosed species.

Indoor Enclosure Ground

- All indoor enclosures have appropriate non-slip flooring to allow for sanitation, comfort, and safe movement. Dry bedding materials are provided in a sufficient amount/depth to ensure comfort and warmth as needed.
    - Indoor enclosures/barns have a non-slip floor to prevent slips/falls. Packed dirt floor with dry bedding or concrete floor covered with dirt or non-slip rubber mats are typical and preferred.
    - Animals are not housed directly on concrete or wood flooring.
    - Recommended bedding includes clean, dry straw or non-toxic wood shavings (aspen preferred).
    - Wet areas of substrate should be cleaned and dried regularly using an animal-safe drying agent
- All animals are observed regularly for signs of illness that may be related to ingestion of foreign objects, including bedding or other materials that may pose a hazard.
- Additional comfort measures should be considered for ill, debilitated, geriatric, or pregnant/postpartum animals.

H-3 Gates and Doors

Animal enclosure gates and doors, including transfer doors, are appropriately designed to ensure both animal and human health and safety, and are properly maintained to ensure proper functioning.

General

- Gates and doors are at least as strong, and as effective, in containing the animals as the rest of the enclosure barriers. Gates and doors are designed and maintained so as to prevent animals from lifting them from their hinges or unfastening the securing device.
- If using gates as a squeeze for cows, or to tie-off, gates should be sandwiched between hinges to prevent cows from lifting gates off hinges.
- Gates and doors should be designed to allow caregivers a clear view of enclosures and animals while operating.
- Doors are designed to allow for animals' normal posture while travelling through the doorway.

- Gates and doors are constructed of appropriate materials to ensure safety of animals and humans.
- Gates and doors are designed to remain functional under all circumstances, are maintained in good working order and free from any encumbrances that may prevent opening and closing.
- Doors and gates are lockable in both the open and closed positions.
- Double/sequential gates may be used to prevent animal escape from holding areas and increase ease of caretaker entrance/exit.
- Sliding doors are secured to prevent animals from opening or closing, as well as from the wind catching the doors. Sliding doors are protected by a gate when shut.
- Multiple locks/lock types on gates/doors are encouraged as some species are adept at opening a single lock.

Preferred practice:

✓ Enclosure fence lines include at least one drive-in access point for emergency access and enclosure furniture placement is designed to allow easy vehicle access.

H-4 Shelters

Animals have access to natural or artificial shelter that provides each individual with protection from extreme weather.

- Animals have space to seek refuge from sun, wind, inclement weather and enclosure mates.
- Primary shelter/indoor enclosure provides:
  a. an overnight space safe from predators.
  b. sufficient clean, dry bedding for warmth and resting.
  c. sufficient warmth in cold weather and shade in hot temperatures.
  d. dry space during wet weather.
- Shelter does not create or result in ‘dead ends’ in which individuals can be trapped by other group members.
- Design allows all animals with physical limitations easy access to indoor enclosures/barns/shelter.
- In addition to primary shelter, other shade and weather protection can be created through natural and artificial means including rock overhangs, shade trees, shade fabric, three-sided structures.

Primary Indoor Enclosure (Shelter) Space and Size

- Many factors influence the minimum space required for animals, including natural species-specific behaviors, health needs, and social groupings. Facilities should provide as much space as is possible and/or practical.
- Animals requiring treatment for illness or injury are housed in enclosures that allow for appropriate treatment and ease of care. Space should allow animals to rest comfortably and move around in accordance with medical recommendations.

- Barn or pen size is dependent on intended purpose and/or duration of confinement, ensuring that ruminants/camelids can be housed with or in view of at least one other member of their species or preferred companion. Enclosures are large enough to allow all animals to comfortably move around and to lie down, while accommodating social dynamics.
- Whenever possible and species appropriate, separated animals have visual and tactile access to group members to facilitate reintroduction.
- In indoor enclosures for large ruminants, such as bovines, ceilings are high enough to accommodate equipment to move downed animals.
- Indoor furniture is constructed of materials that can be sanitized or easily replaced when they become overly soiled and can withstand activity of species housed. Furniture is accessible to staff for routine cleaning and repair.
- Enrichment (simple, sturdy toys, puzzle feeders, etc.) should be provided to ruminants confined in these spaces for extended periods.

Preferred Practice:

- ✓ Shade and shelter are provided in multiple locations within enclosures to ensure that all animals have access throughout the day.
- ✓ Fully enclosed, wooden pole barns are recommended for most ruminants/camelids as a primary housing/shelter. Those housing cows are reinforced with an inner half wall to prevent pushing out the walls.
- ✓ Barns and pens include a minimum of one wide, vehicle accessible door per barn/pen to the main outdoor enclosure.

H-5 Enclosure Design

Animals are provided with an appropriately complex and rich habitat to explore, to ensure the animals' physical, nutritional and stimulation needs are met.

Outdoor Enclosure Space and Size

- Sanctuaries having minimal enclosure space employ additional environmental enrichment, focusing on physical and mental exercise in addition to food, to compensate for reduced space and complexity.
- The use of a rotation system, which allows groups and/or individual animals to regularly spend time in a larger or different space, is strongly encouraged to rest pasture, increase enrichment and encourage activity.
- Enclosure shape may be variable to take in natural features in the landscape such as rock formations, hills and trees. Care should be taken to block access to areas that present a fall or slip risk, particularly in cold climates with icy conditions.
- Outdoor enclosure size and pasture is sufficient to support grazing and browsing needs of species housed there. High quality pasture with browse is recommended.
    - Wherever possible more space is provided to allow for movement, grazing, and play behaviors, and social preferences.
- Mixed species housing

- Where multiple species share an outdoor enclosure, the total dimension is adjusted to reflect the spatial requirements of each species housed for grazing, browsing, exercise, etc.
- Mixed species groupings are appropriately researched to ensure compatibility and to avoid unnecessary stress for all species. Most of the included ruminant and camelid species can generally live together, dependent on individual preferences and personalities. Care should be taken with animals with horns who may hurt others nearby.

Outdoor Enclosure Features and Enrichment

- Enclosures are equipped in accordance with the needs of the animals with bedding material, water sources such as ponds or streams, appropriate substrate, vegetation and other enrichment materials designed to aid and encourage normal behavior patterns and minimize any abnormal behavior. Items must be safe for species housed and be unlikely to result in entrapment or injury.
  - Examples include sandy areas for sand bathing, trees for scratching and/or browsing, rocks, jungle gyms, spools, etc. for playing
- Appropriate complexity is provided through the use of various natural and artificial materials in the enclosure, using a combination of items including, but not limited to, those listed above.
- Visual barriers can be used to avoid confrontation or aggression, and include walls, boulders, shade structures, topography and large enrichment items.
- Sites for resting with grass/pasture substrate or bedding with shelter from sun and wind.
- Pasture and woodland, free of large holes or obstructions, are available to allow animals to run and play.
  - Woodland and browsing species have access to large areas of wooded space for browsing and other normal activity.
- Water sources/wallows such as streams, ponds, mud wallows are provided as species appropriate.
  - Water sources have gently sloping access and no quick drop offs so animals can safely walk into and out of the water.
  - Roots, trees and stumps on shore and in the water can provide additional enrichment for animals.
  - Mud wallows are provided, as species appropriate, to aid in cooling.
- Rocks or brushes for rubbing and scratching skin.

Fencing

- Perimeter containment of outdoor areas is constructed so as to demonstrably reduce breach by native wildlife, domestic species, enclosure residents, and unwanted human intrusion.
- Fences and enclosures are inspected daily for signs of breach as well as sharp edges created due to damage.
- The supporting posts for fences are firmly fixed into the ground. Where fencing meets hard surfaces such as rock or concrete, the fencing is securely anchored in place. Metal T-posts used as supporting posts for fences must have safety caps.
- Rails are of sufficient strength to withstand pressure from animals. Where wooden rails are used, they are regularly inspected for damage from chewing by the animals.

- Fence material is sufficiently secured to supporting posts in such a way that the weight and/or activity of the animals could not detach it from the support nor dislodge the supporting posts. Posts spacing of approximately 10 ft (3m) is recommended to support fencing stability.
- Fences are sufficiently high and constructed in such a way to prevent escape (e.g., use of overhang, hot wire). Sanctuaries located in cold climates with significant snowfall should take into account snowdrifts along fencing that would allow animals to climb over and escape, either through increased fence height, limited seasonal access, or prompt snow removal.
- Barbed or razor wire are not used to contain ruminants/camelids, nor slatted fencing or any fencing where animals may become entrapped.
- Recommended fencing materials include but are not limited to:
    - Rigid, non-climbable woven wire mesh is recommended for most ruminants. For extra security relating to both predators and fence damage by residents, fencing can be embedded into ground and buried.
    - Wood corral boards on outside of woven wire for support
    - A combination of these materials
    - High tensile wire (cows, see Electric Fencing below)
- Dimensions
    - Recommend 2 in. x 4 in. (5 cm x 10 cm) woven wire
    - Minimum vertical dimension of 4 ft. (1.2 m) non-climbable fence, 5 ft. (1.5 m) preferred for high-jumping individuals.
    - 6.6 ft. (2m) for camels

Preferred Practice:

- ✓ Goats housed adjacent to one another are separated by non-arsenic pressure treated wood boards between non-climbable wire fencing on either side to withstand head-butting and other behaviors which may deteriorate fencing over time from either side

Electric Fencing

- Energizers are connected to battery or generator backup for continuous power supply during outages. Two circuits with independent power sources may be used so that one fence remains functional should the other short out.
- In dry climates, the earth rod area is watered to ensure adequate grounding.
- If using electric fence as a primary barrier, regular checks should be completed to ensure effectiveness and reduce the chance of system failure.
- Safety signs on hot wire are visible to staff and bystanders.
- Chargers and related electric components and wires should be kept out of reach of animals.
- Electric fencing may be used in combination with other materials to contain cows, but is not recommended for sole use with other ruminant/camelid species covered

H-6 Sanitation

Proper sanitation is practiced to reduce pathogen transmission.

- Uneaten perishable food is removed within a timeframe appropriate for the type of foodstuff and size of enclosure, prior to molding or contamination.
- Animal waste is removed from the habitat as often as necessary to prevent contamination of the animals contained therein, to minimize disease hazards and to reduce odors. Soiled bedding material and substrate are removed and replaced with fresh materials daily, or as needed to prevent buildup.
- Wet areas of substrate should be cleaned and dried regularly using an animal-safe drying agent.
- Animal waste is handled with precautions appropriate to bio-hazardous waste and according to any local, state, or federal regulations. Responsible manure management is practiced to prevent hazardous water or soil contamination and reduce risk of pest issues resulting from onsite manure.
- Damaged and soiled enrichment items which pose a danger are removed daily, or as soon as the animals are allowed access to the area.
- Each enclosure has dedicated tools to prevent cross contamination between enclosures. When resources restrict the ability to have dedicated tools, tools are disinfected between enclosures to prevent the spread of parasites and disease.

Cleaning and Disinfection

- Feeding areas, automatic water devices, water and food containers are cleaned and disinfected regularly.
- Animals are not present in enclosures being cleaned using power hoses. Care is taken to prevent accidental spraying of animals in adjacent enclosures when power hoses are used for cleaning.
- All hard surfaces including walls, floors, ceilings, benches, climbing structures, cage mesh and caregiver work areas are sanitized regularly to the extent possible. Organic material is removed regularly and prior to sanitation. Note that in large outside enclosures with plenty of exposure to sunshine and rain, there may not be a need for scrubbing and cleaning but areas are monitored for potential sanitation problems.
- Cleaning and disinfection Standard Operating Procedures are developed and followed to address:
    - safe but effective disinfectant use to prevent hazards to the animals, caregivers and the environment;
    - cleaning and disinfecting protocols for food preparation and veterinary care areas using more powerful disinfectants on hard surfaces;
    - cleaning schedules to minimize the risk of disease transmission
    - disinfectants and other cleaning products stored separately from foodstuffs.
- Laundry for animals is done in a washer/dryer used to wash items soiled by animals only (*e.g.*, towels, blankets, enrichment items).
- Sanitation tools or equipment, including wheelbarrows, are not used for transport or storage of foodstuffs or bedding.

Preferred practice:

- ✓ Animals are transferred from enclosures prior to cleaning, disinfection and/or sanitizing.
- ✓ Where available, a Material Safety Data Sheet (MSDS) or equivalent is readily available for all cleaning products in use and all containers are properly labeled as to contents.

H-7 Temperature, Humidity, Ventilation, Lighting

Temperature, humidity, ventilation, and lighting are appropriately addressed.

Temperature

- The temperature is within an acceptable range for the species housed. Allowance is made to accommodate individual animals not able to tolerate temperatures above or below the usual range of comfort for the species. Great caution is taken with elderly, infant and disabled animals.
    - Wind chill and humidity are taken into consideration.
    - Animals should have continuous access to clean, liquid water to help with temperature regulation and prevent dehydration. Warm water during winter is preferable and will prevent additional heat loss.

Cold

- Barns/indoor enclosures may be insulated to increase heat retention provided insulation does not attract rodents and residents are unable to access and chew insulation.
- Such well-insulated barns with appropriate bedding may be sufficient, without supplemental heat, for those domestic ruminant/camelid species particularly prone to pneumonia. Attention is also paid to providing adequate ventilation to reduce disease risk.
- At temperatures below 15°F (-11°C), frostbite of ears, tails, horns and/or feet is a serious concern for most ruminant/camelid species.
- Clean, dry nest areas/deep bedding are provided for all animals in indoor enclosures.
- Continuous access to hay and/or increased feed is provided to help animals maintain body temperature during cold periods.
- Animals are prevented from accessing icy areas that pose slip/fall hazard in freezing temperatures. Slippery areas are amended to create traction.
- Care is taken to prevent direct animal contact with heat sources and cords. Note: Infrared bulbs or ‘heat lamps’ are not recommended as heat sources due to risks associated with bulb breakage and tissue damage to animals.
- Heating blocks/panels and underfloor radiant heating are safer options. If used, they are installed and used so as to ensure they pose no risk to the animals.
- Coats are provided to individuals who need extra warmth (ex. small, sick, geriatric or debilitated). Correct fit is ensured and coats are checked regularly to stay clean and dry.
- All heat sources should be cleaned regularly to remove dust and minimize fire risk.

Warm

- Heavily coated species such as llama, alpaca and sheep maintained in warm climates are sheared prior to the onset of hot weather to reduce risk of hyperthermia.
- Cool air can be provided by fans, misters or water sources suitable for wading or submerging. Ensure animals cannot access cooling implements or cords.
    - Even when ambient temperatures are ‘warm’, bare concrete floors, especially damp floors, are too cold for many individuals and are not considered suitable substrate or housing for ruminants/camelids.

- Shade is available throughout the day in a number of areas, which provides an adequately sized space to accommodate all animals simultaneously with consideration for social structure and relationships within a group.

Ventilation

- Proper ventilation of indoor enclosures is critical to manage humidity and temperature.
  - Humidity is maintained within the optimal range for the species housed to minimize health risks arising from excessive moisture.
  - Ventilation adequately controls ammonia levels.
  - Ventilation and air circulation is required in both warm and cold weather.

Lighting

- Light, natural and artificial, is appropriate for the species housed.
- Animals are provided at least 6 hours of dark per day.
- Supplemental lighting is provided as needed to ensure adequate light for caregivers to observe animals, clean enclosures and perform related animal care tasks.
- In the event of outage, emergency lighting is provided through an alternate power source.

Preferred practices:

- ✓ Any climate control systems include back-up power in case of equipment or power failure.
- ✓ Animals have the opportunity to choose temperature ranges within an enclosure. This can be achieved by access to areas near heat vents, skylights, or warmers for example.
- ✓ Animals have automatic waterers with heaters to ensure continuous access to clean, liquid water.

NUTRITION REQUIREMENTS

N-1 Water

Fresh clean water is available in sufficient quantity at all times to all individuals.

- Water sources and delivery systems are assessed multiple times daily to ensure that water is available to all individuals and that high-ranking individuals do not dominate water sources.
  - Should an animal become significantly dehydrated, a veterinarian is consulted.
  - Receptacles are installed in such a way as to mitigate risk of drowning by young animals.
- Where possible, potable water sources are tested for contaminants as indicated by the sanctuary director or veterinarian.
- All water receptacles (including water bowls) are cleaned at least daily and disinfected as needed.

- Where automatic water devices are used:
  - Devices are tested daily to ensure fresh clean water is available in sufficient quantities.
  - Devices are easily disabled when animals must be fasted for medical purposes.
  - When monitoring of water consumption is required, an alternative means of providing water is devised.

Preferred Practice:

- ✓ In colder climates, steps are taken (such as installation of heat sources) to ensure water consumption does not decrease with lower ambient air temperatures.

N-2 Diet

A properly balanced and healthy diet is provided appropriately based on the needs of each animal, following veterinary instructions for special needs.

General

- A veterinarian or qualified veterinary nutritionist periodically reviews all aspects of the animals' diets at the sanctuary and makes adjustments to individual diets with consideration of species, age, life stage, size and condition (including excess weight gain, production-related metabolic concerns, diabetes, urinary disease risk).
- The calories/nutrients in foods used as enrichment are considered when planning the overall diet.
- Diets of individual animals (including vitamin supplementation) are of a quality, quantity and variety to match the physiological and psychological state of the individual as it changes over time, with consideration for the age, life stage, species, condition, and size of the individual.
  - Malnourished ruminants/camelids are provided with an appropriate, veterinarian approved re-feeding diet.
- Food is wholesome, palatable, free from contamination and of sufficient quantity and nutritive value to maintain all animals in good health.
- Sudden changes in food consumption and other behaviors are immediately brought to the attention of supervisory staff.
- Where possible and appropriate, each animal's daily dietary needs are documented and made available to animal care staff.
- Regular, updated documentation of each resident's body condition score is maintained

Forage

- Forage is the basis of the ruminant/camelid diet. Where natural forage/browse is insufficient in quality or quantity, quality hay and or hay products are used to supplement the diet.

Commercially Prepared Complete Feed

- Complete feeds should be limited to use as a supplement to pasture, browse or hay to ensure proper nutrition and allow for normal foraging behaviors unless otherwise directed by a veterinarian.

Vegetables and Fruits

- A variety of vegetables and fruit may be offered as a minor component of the diet of ruminants/camelids, as species appropriate.
- The fresh produce portion of the diet is not heavily dependent on over ripe and/or sugary fruits.

Pasture and Browse

- Where possible, animals are allowed to browse or graze on pasture, scrub or forest lands, as species appropriate, as their primary diet.
- Pasture management ensures parasite exposure is minimized and vegetation is healthy. Attention is paid to ensuring the diet remains balanced through nutritional content analysis/testing. Quality hay can be used to supplement any nutrients lacking.
- Hay feeding areas are cleaned to ensure animals do not consume feeds soiled with feces and urine.
- Freshly cut plant material including grasses, leaves and branches may be offered regularly to promote natural feeding behaviors, particularly where grazing or browsing land is not available.

Vitamins/Supplements

- Prior to offering vitamins or other supplements, the individual animal's health and condition, as well as the diet, are reviewed by the veterinarian or a nutritionist experienced in the species' care.
    - Enclosures housing goats and sheep together should take care to avoid sheep accessing goat mineral supplements due to risk of copper toxicity.

Preferred Practice:

- ✓ While round bales of hay may be most economical, unless there are enough animals in an enclosure to consume the entire bale within 3-5 days, the bale should be fed under a cover. If this is not possible, it is recommended that small square bale hay be utilized instead.

N-3 Food Presentation and Feeding Techniques

Food is prepared and presented in a safe and appropriate manner to meet animals' health and social needs.

General

- Food receptacles, where used, are appropriate for the species housed in terms of number, size and placement, and are cleaned daily.
- Receptacles for animal food and water are designed to minimize spillage and risk of contamination and are not used for any other purpose.
- Single feeding regimens are carefully monitored and reviewed frequently to ensure they meet the animal's nutritional and psychological requirements.

- If applicable, ruminants/camelids are fed the non-browse/grasses portion of their diet a minimum of twice daily during the active feeding time of the species housed.
- Ruminants/camelids have access to browse or other natural plant material throughout the day and night, to encourage normal foraging behavior and reduce the incidence of stereotypy.

Feeding Techniques

- The sanctuary utilizes a feeding regimen that ensures each individual receives adequate nutrition regardless of status in the social group. In open space enclosures/pastures, routine observation of feeding activity ensures all animals can access sufficient feed.
- Distributing food throughout an enclosure allows natural foraging behavior and may limit food hoarding and aggression.
    - Feeding in multiple locations helps to ensure that low-ranking individuals have adequate access to food and water.
- Where possible integrated individuals are fed together to maintain social relationships, however, it may be necessary to separate animals to prevent aggression over food items and to allow accurate measurement of food consumption.
- Food may be offered in outdoor pens/pastures and indoor areas/barns to increase the animals' comfort with those areas and improve reliability in transferring from one area to another.
- Ground feeding is minimized to lower parasite exposure.
- Hay feeders (certain hay racks, string hay feeders, etc) which may be inappropriately ingested themselves or cause entanglement or entrapment are not used.
- If cows are fed hay outdoors, a covered feed area is recommended.

Diet Changes, Increases or Decreases

- Any diet changes are made or approved by the veterinarian or other qualified personnel, with any adjustments made to the entire diet to ensure continued nutritional balance.
- Diet changes are conducted gradually unless otherwise directed by a veterinarian.
- Considerations for diet increase include weight and condition of the animal, food consumption, activity level and other medical or behavioral consideration.
- Underweight individuals experiencing health or behavioral problems may be separated for supplemental feeding as needed to avoid undesirable weight gain in conspecifics.

N-4 Food Storage

Food is stored appropriately to prevent spoilage and contamination.

- Dry goods (*e.g.*, grains and biscuits) are stored in clean, dry storage areas in sealed containers or on pallets.
- Items frozen for use are dated and labeled, and no frozen items are thawed and refrozen.

- Browse, grass hay, alfalfa and other baled products are stored in a sheltered area on pallets, and oldest stock is used first. Care is taken to remove any baling string to prevent ingestion by animals.
- Food items requiring refrigeration are stored in a clean, dry refrigerator, and/or ordered at regular intervals in amounts that can be used prior to spoilage.

Preferred practices:

- ✓ Products are dated and rotated to use oldest stock first, and expired food as well as bags damaged by pests are discarded.
- ✓ Hay moisture levels are tested periodically to reduce fire risk as well as risks with microorganism growth and spoilage due to excess humidity.

N-5 Food Handling

Food is handled and prepared in an appropriate manner to retain nutritional value, freshness, and freedom from spoilage, invasive species or other forms of contamination.

- Food is protected against dampness, deterioration, mold, and/or contamination by insects, birds, rodents, or other animals.
- Diets are prepared in a safe and hygienic manner to reduce the possibility of contamination or spoilage.
- Food preparation surfaces are thoroughly cleaned after use.
- Personnel wash hands thoroughly prior to handling food and wearing gloves during food preparation is recommended.

Preferred Practice:

- ✓ Separate cutting boards, utensils and food preparation surfaces are used when produce diets are prepared in a common kitchen area.

VETERINARY CARE

V-1 Veterinary Program Personnel

The sanctuary's veterinary medical program is developed and carried out under the supervision of a licensed veterinarian and with adequate support personnel. Veterinary care is on-site or on-call at all times.

- Sanctuaries unable to maintain a full-time veterinarian have access to a part-time or on-call veterinarian with suitable training and experience for the animals housed at the sanctuary.

- The sanctuary has properly trained and qualified professional and supporting personnel as necessary to implement: (1) husbandry (caregivers) and (2) technical support (veterinary technicians, or individuals trained at the sanctuary).
- One or more personnel is trained and designated to deal with emergencies until a veterinarian arrives or is reached. He or she can, under the direction of the veterinarian, perform basic first aid, assess animals, administer prescribed medications and treatments, be responsible for administration of post-surgical care, and be skilled in maintaining appropriate medical records.

V-2 Veterinary Capabilities

The sanctuary has on-site and/or off-site capabilities for pathology, surgery, and other veterinary procedures and treatments, and any on-site facilities are appropriately maintained.

- If the sanctuary does not have an on-site veterinary facility, or only a partially outfitted facility, it has an arrangement with a nearby veterinary practice for off-site treatment as needed.
- The sanctuary's on-site and/or off-site facilities and services include the following:
    - Diagnostic capabilities include cytology, microbiology, parasitology, complete blood count, blood chemistry, urinalysis, serology, imaging and other appropriate laboratory procedures;
    - Surgical facilities that are clean, have adequate lighting and ventilation, and can be easily cleaned and disinfected.
    - Surgical facilities that have access to appropriate anesthetic and emergency equipment.
    - At minimum, first aid supplies and/or an emergency care kit are available on-site and are regularly stocked/maintained for trained personnel use
- If on-site, the sanctuary ensures that surgical equipment is maintained in good working order and is on a program of routine preventive maintenance.
- Only a licensed veterinarian performs surgery, using standard operating procedures. (Note: A veterinary technician appropriately trained by a veterinarian in locations where such action is permitted by veterinary practice acts can perform surgical first aid.) Anesthetic protocol should be determined by a veterinarian and administered by experienced veterinary personnel.
- Veterinarians and support personnel are compassionate and knowledgeable about the humane aspects of animal treatment, including low-stress handling techniques, the proper use of anesthetics, analgesics, and tranquilizers to reduce pain and stress during treatments/procedures as well as for acute and chronic conditions causing pain.
- Basic physical capture and restraint equipment to facilitate medical treatment is available at the sanctuary. See also Standard W-6 "Handling and Restraint."

Preferred practices:

- ✓ Where possible, an on-site facility has separate areas for examination and treatment for any of the following functions performed on-site:
    - sterile surgery

- necropsy
- storage of carcasses awaiting necropsy or burial/cremation (Note: Any refrigerated area for holding deceased animals is physically separate from live animal holding, treatment, and surgery areas and from food supply storage or preparation areas)
- quarantine (see Standard V-4 “Quarantine and Isolation”)
- laboratory
- radiology and radiology equipment
- animal holding areas for observation and pre- and post-surgical

✓ Where possible, any on-site facility is located away from areas of heavy public use to minimize noise levels for hospitalized animals.

✓ On-site veterinary facilities have non-absorbent and non-impact resistant surfaces, traction mats, floors sloping toward drains, air handling systems, ceilings, doors, hospitalized animal enclosures, and storage areas.

V-3 Preventative Medicine Program

The sanctuary has a complete preventative medicine program, pursuant to a written protocol, appropriate for each species housed.

- The veterinary medical program includes long term preventative medical protocols and disease surveillance and containment procedures, and is developed and carried out under the supervision of a licensed veterinarian with training or experience in providing medical care for all ruminants/camelids housed at the sanctuary and who is knowledgeable about issues facing the animals regionally.
- Appropriate preventative medicine programs are in place to manage all animals, and the sanctuary has a written preventative medicine protocol addressing the following:
  - regularly scheduled physical examinations/health assessments
  - behavioral assessments
  - quarantine procedures
  - parasite surveillance and control
  - immunization
  - contraception
  - infectious disease screening
  - dental prophylaxis
  - periodic reviews of diets
  - hoof care
  - applicable species-specific husbandry needs (see Shearing below)

- Appropriate care personnel are provided with this protocol and any updates made to it, and steps are taken to ensure compliance.

- The attending veterinarian, in consultation with the sanctuary director, determines any schedule for routine physical examinations, including ocular, dental and musculoskeletal assessment, and implements any necessary treatment.
- Animals are immunized as recommended by the attending veterinarian, using currently recommended procedures and products as appropriate for the country and region, species and individual. When animals are immunized on-site by sanctuary personnel, the type, serial number, and source of product are recorded in the individual animal's medical record.
- Where possible, each animal is weighed annually, either during a routine physical or through the use of a built-in scale, to monitor for signs of illness and to determine dosages for chemical anesthetics.
- A veterinarian, veterinary technician, or other trained personnel record body/muscle condition for each animal consistent with any applicable scoring system.
- Hoof care is performed by experienced animal care personnel or farrier (cows)

Shearing

- Fiber animals (ruminant and camelid) must be shorn once yearly. Certain Longwool sheep (such as Border Leicester, Lincoln Longwools), Angoras, and many of the primitive sheep (such as Shetlands, Icelandics) are recommended to be shorn twice a year.
- Climate and individual needs should be considered if altering the shearing protocol. Geriatric residents may need less frequent shearing and/or their neck fiber left on (alpacas & llamas). Individual comfort/needs should inform this decision.
- Animals should be shorn at the appropriate time of year depending on climate. Areas with periodic cold should have coats available, particularly for geriatric or thin animals.
- Animals should never be shorn during extremely hot days/temperatures.
- Shearing should be done as efficiently as possible to minimize stress for the animal (between 5-10 minutes per animal is typical, with the exception of goats). Care should be taken to avoid nicking the animal.
- Shearing equipment should be well maintained to help reduce nicks and injury.

Preferred practices:

- ✓ A veterinarian, veterinary technician, or other trained personnel performs regular fecal examinations to look for pathogens (random enclosure sampling is adequate for group-housed animals, though individual sampling is always preferred). Results are recorded. Fecal examinations are repeated following treatment to evaluate efficacy.
- ✓ In areas with known parasite resistance, the sanctuary works closely with their veterinarian to establish appropriate screening measures as well as criteria regarding when to utilize dewormers in order to prevent further resistance issues
- ✓ In areas where Barber pole worm (*Haemonchus contortus*) is common, regular FAMACHA scoring (by a trained individual) should be performed to identify affected individuals for monitoring or treatment
- ✓ Hoof and toenail checks and trims are performed monthly
- ✓ Shearing is performed by a professional or an individual at the sanctuary who has taken a class to become trained in shearing patterns and equipment.
- ✓ Shearing and hoof care equipment should be cleaned/disinfected between residents as needed to prevent disease transmission.

- ✓ When circumstances permit, and as appropriate for the individual animal, physical exams include routine diagnostic screening and the results are recorded.

V-4 Quarantine and Isolation Care and Facilities

Appropriate quarantine and isolation policies and facilities are in place for the protection of animals and personnel.

General

- All ruminants undergo quarantine according to the protocol established by the attending veterinarian and in compliance with applicable laws and regulations. Animals previously housed together may be quarantined together.
- If the sanctuary does not have an adequate quarantine facility, steps should be taken to have animals undergo quarantine under these guidelines prior to their arrival.
- Where possible, staff working in quarantine areas does not work with other sanctuary animals. If this is not possible, work is done in the quarantine areas last.

Quarantine Areas and Equipment

- Quarantine areas should be located such that they are removed from permanent residents so as to reduce direct contact, contact by aerosolization or drainage, or potential fomite transmission.
- Quarantine areas have adequate ventilation - heat and air conditioning when needed - which are used to ensure optimum conditions, particularly in the case of young, elderly or sick animals who may be more sensitive to environmental changes.
- All utensils, equipment, supplies, and outer clothing used in quarantine are restricted to that area. Where this is not possible, items that the sanctuary does not have duplicates of and which cannot be restricted to quarantine areas must be thoroughly cleaned and disinfected prior to being moved to or from quarantine areas, and movement between areas should be minimized.
- Protective clothing, boots and footbaths are used by all staff entering the quarantine area or areas containing quarantined animals. Quarantine clothing is not removed from the quarantine area, except in a sealed container for cleaning. Footbaths are changed regularly and should contain a disinfectant that is effective in the presence of organic material.
- Caregivers wear protective clothing and equipment (e.g., gloves, masks, boots, boot covers) when cleaning or handling anything with which the quarantine animals come into contact.
- The quarantine area allows for daily cleaning and sanitation, and waste is removed and disposed of properly.
- In enclosures housing animals carrying infectious or transmissible diseases, to the extent possible, all surfaces of the enclosure are properly sanitized.
- Quarantine animal waste is handled separately from all other manure or compost at the facility. Because of the risk of disease transmission, quarantine waste is not spread on pastures or composted.
- Clearly visible signs indicating areas of quarantine are displayed as needed, with particular consideration for placement at entry/access points.

Quarantine Care

- As soon as possible upon arrival, animals should be weighed and inspected for injuries or disease.
- During quarantine of incoming animals, the following procedures should be performed as applicable: examination, vaccination as appropriate, clinical and laboratory tests, treatment for external and internal parasites as needed, evaluation of psychological well-being, verification of identification.
- An enrichment program is in place for quarantined animals.

Isolation Enclosures

- The sanctuary has enclosures for animals who need to be isolated for close monitoring, such as following injury or recovery from surgery.

Preferred practices:

- ✓ Quarantine staff cares for newly admitted animals in their quarantine area before caring for sick animals, which are housed in separate isolation enclosures.
- ✓ Outdoor access is provided to quarantined animals.
- ✓ Animals that die in quarantine receive a complete postmortem examination including histopathology.

V-5 Medical Records

Complete medical records are maintained, and animals have permanent identification.

- Complete medical records for all animals are maintained under the direction of a veterinarian or trained caregiver.
    - Medical records are dated, legible and indicate care and procedures including the following: examination findings, diagnoses, treatments (types of medication, dosage, duration), surgical procedures, anesthetic procedures, laboratory test results, pathology reports, immunization records, animal identification (*e.g.*, microchip number, tattoo, photo) and nutrition/diet information, and, where applicable, necropsy reports.
    - Records of individual animals include both behavioral and veterinary history.
- Copies of medical records accompany any animal transferred to another sanctuary or other appropriate facility.

Preferred practices:

- ✓ Statistics are tabulated regularly on the rates and nature of illness and mortality in the sanctuary.
- ✓ Where possible, duplicate record sets are stored at another site, or in a fireproof or theft proof safe on site or an online storage system.

✓ Records are maintained in an electronic format and/or in a shelter software.

V-6 Medication Handling and Storage

All medications are purchased, prescribed and administered under the guidance of the veterinarian, and controlled substances are prescribed and stored.

General

- Medications are maintained and used in accordance with local, state/province, and national laws and regulations and are administered in accordance with the applicable veterinary practice acts.
- The sanctuary has pharmaceutical storage on-site where routinely used drugs, such as emergency resuscitative medications, antibiotics, anthelmintics, fluids, anesthetics, analgesics, tranquilizers, etc. are maintained. Medications are stored according to label directions and, when necessary, in a safe for controlled substances that meets the standards set by applicable regulations (*e.g.*, the Drug Enforcement Administration in the United States). Medications and vaccinations are stored appropriately, refrigerated as needed, and with access limited to essential personnel.
- All medical treatments and drug prescriptions are documented in the animal's medical record.
- Medications are regularly checked to determine expiration dates and discarded under the guidance of the veterinarian.

Controlled Substances

- Only a licensed veterinarian prescribes controlled substances used at the sanctuary.
- Controlled substances are stored securely, with only key qualified personnel having access.
- Use of controlled substances is recorded in accordance with any applicable laws.
- Expired controlled drugs are marked as such and stored separately until they can be discarded consistent with applicable laws.

V-7 Breeding Policy and Contraception

There is no intentional breeding of animals in lifetime care.

- Contraception programs are appropriate for ruminants/camelids and as determined by the veterinarian to prevent breeding.
- Physical (Burdizzo clamp, Banding/Rubber Ring) and chemical (intratesticular injection) castration methods causing prolonged pain without anesthesia or analgesia are not acceptable.
- If animals arrive at the facility pregnant, the sanctuary provides necessary care as determined by the veterinarian. Infants are only removed from the mother for hand-rearing if there is a threat to the life of the infant or mother.

V-8 Zoonotic Disease Program

The personnel and sanctuary veterinarian are knowledgeable about zoonotic diseases that may affect animals at the sanctuary, and implement appropriate policies and procedures as needed to mitigate risk and deal with any exposures that occur.

- The sanctuary has emergency procedures and a defined process to avoid transmission of all potential or emerging diseases through bites, scratches, body fluids, direct contact with animals and other means. (Note: Additional precautions may be necessary for personnel classified as increased risk of disease, including those who are immune-compromised, and for personnel working with animals known to be carrying zoonotic diseases.)
- Personnel have adequate training to understand the potential risk of disease transmission, including potential sources of disease, modes of disease transmission, and clinical signs associated with disease. Training includes handling techniques used to reduce incidence of exposure. Records of any in-person training are maintained. All personnel are informed when a zoonotic disease occurs at the sanctuary, and relevant personnel are trained in how to safely care for animals with disease.
- PPE and safety equipment is available to personnel to help prevent transmission.
- When a reportable disease is identified, all local, state/province, and national regulatory officials are contacted, as required.
- All areas in which personnel have direct contact with animals have hand-washing facilities available in the immediate vicinity (or an equivalent, *e.g.*, bactericidal hand-wipes).
- Human food consumption by personnel does not occur in the immediate area of animal contact.

Preferred practices:

- ✓ Attendance logs are maintained for any training sessions.
- ✓ When possible, a necropsy is performed on deceased animals known or suspected to carry zoonotic disease.
- ✓ Key personnel working closely with animals should consider vaccination for certain zoonotic diseases (ex. Rabies)

V-9 Euthanasia

Euthanasia is governed by an ethical written policy that includes identification of appropriate personnel and procedures.

- The sanctuary has a written policy addressing the circumstances surrounding euthanasia decisions and procedures, including the following:
  - Euthanasia is performed in compliance with any national or local law, administered under the strict supervision of a licensed veterinarian. The veterinarian, his/her authorized representative, or a trained staff member who is knowledgeable and skilled in performing euthanasia in a professional manner and ideally with an established relationship with the

sanctuary and the animal, recommends and performs humane euthanasia. Euthanasia is in the best interest of the individual animal and is only used as a final option and is not used as management tool (such as a means to create space for more animals).

- Acceptable reasons for euthanasia include:
  - incurable medical/behavioral health status that is likely to cause unmanageable pain or suffering;
  - medical/behavioral health status where treatment is likely to cause unreasonable pain or suffering;
  - medical/behavioral health status where available treatment will not be effective in restoring the animal to an acceptable quality of life;
  - medical/behavioral health where treatment is beyond the normal community standards of monetary expenditure and would cause an excessive burden on the sanctuary resources, and no other facility /placement provides a reasonable alternative option;
  - the process of aging has resulted in an unacceptable quality of life;
  - in the event of presenting a fatal or severe infectious disease risk to some or all of the residents that cannot be mitigated through alternative methods;
  - in the event of presenting a high risk of harming themselves, other animals and/or humans.
- For facilities engaged in the rehabilitation and reintroduction of wildlife and which do not provide permanent sanctuary care, consideration of an animal's ability and/or potential to survive as a free-living animal may also form the basis for euthanasia, as this is part of the animal's quality of life. For these facilities, this determination should be in accordance with an appropriate protocol or other "decision tree" analysis that an animal cannot be reintroduced to its natural habitat and there is no appropriate (consistent with these standards) short-term or long-term care option.
- Euthanasia is performed so that it avoids distress to the animal, and unless impossible, is performed out of view of other animals.
- The species and ecosystems are carefully considered during disposition activities.

WELL-BEING AND HANDLING OF RUMINANTS/CAMELIDS

W-1 Physical Well-Being

Animals should be routinely monitored to ensure their physical well-being, and any unusual activity should be reported and recorded, with appropriate response.

- Qualified personnel conduct daily observations of each animal to monitor for signs of physical abnormalities.
- Consideration is given to nutritional, physical, and social conditions.
- Physical abuse, deprivation of food or water, aversive spraying with a hose, and other forms of negative reinforcement or punishment-based training are never used to train, shift, or otherwise care for animals. Note: This does not preclude the use of hoses or other watering devices in caring for animals who enjoy this form of enrichment.

W-2 Social Housing and Group/Herd Management

Animals are grouped so that they are compatible, with consideration to their natural social groupings and individual history, and with the safety of animals and sanctuary personnel in mind.

- Ruminants/camelids are housed so that:
  - those in the same enclosure are compatible,
  - they are not housed near animals that interfere with their health or cause them physical or psychological discomfort,
  - there is appropriate space between individuals within and between social groupings and to allow for temporary isolation from others,
  - no individual endures constant harassment or suffers physical injury, nor do social behaviors prevent any individual from maintaining proper nutrition and hydration.
- The sanctuary has the ability to separate and isolate animals to address behavioral concerns. If animals are isolated from a group for social reasons, all efforts are made to find another suitable social group within the facility or at another accredited institution.
- Except for those species that are naturally solitary in the wild, solitary housing is generally reserved for situations including, but not limited to: quarantine; medical assessment and/or care; lack of appropriate social partners or social tension resulting in disruption to the social group or physical aggression leading to injuries. Ideally and when appropriate, individuals in solitary housing should have access to visual and auditory access to conspecifics as well as regular caregiver interaction.

W-3 Introduction of Unfamiliar Individuals

Introduction of any new animal to a social group is done safely and according to techniques appropriate for each species, under the direction of designated personnel.

- As appropriate or needed, benchmarks or desired outcomes are identified for each step in the introduction process, such as the physical location of animals and behavioral goals during visual contact and tactile contact periods.
- All caregivers have a clear understanding of the plan, including contingencies for problems that might occur, and are empowered to take appropriate action in the event of perceived emergency. At least one caregiver (more preferred) should be present during initial introductions.
- An introduction plan is developed that details a series of steps that will be taken to integrate the individual animals involved. Necessary modifications to enclosures are identified and completed prior to beginning the process.

W-4 Behavioral/Psychological Well-Being

The behavioral well-being of each animal is monitored and evaluated.

- The sanctuary has an enrichment program that promotes species-appropriate behavioral opportunities at all times (including periods of quarantine and isolation) and ensures the animals' psychological well-being. An appropriate program may include the following:
  - Structural enrichment - Enclosure design and furniture that add complexity to the environment and promote species-specific behavior (*e.g.*, climbing, perching, and grazing).
  - Object enrichment – Objects that encourage inspection and manipulation and promote species-specific behavior (*e.g.*, play, nesting, tool-use).
  - Food enrichment - Varying food choices and food presentation, including the use of puzzles that increase food procurement time.
  - Social enrichment – Affiliative interactions between caregivers and animals (*e.g.*, grooming) may be appropriate in some instances.
  - Sensory enrichment - tactile (e.g. brushes, etc.), olfactory (herbs, branches, etc.), auditory (e.g., music), visual (e.g. mirrors)
- All animal care personnel are trained to recognize species-specific behavior, abnormal behavior and clinical signs of illness, and a plan to address the concerns is developed.
- Each individual's history is considered to avoid triggering situations and to identify tactics that may work better to enhance the residents' comfort and well-being.

Preferred practice:

- ✓ Where possible and appropriate, a behavioral/psychological profile is maintained for each individual animal and updated annually. A copy of the report is kept in the animal's permanent file.
- ✓ Individual animal welfare assessments are done on a regular basis to assess resident needs and quality of life with regard to physical and psychological well-being.

W-5 Animal-Caregiver Relationships

Positive relationships between animals and caregivers are maintained.

- Animals arrive at sanctuaries with a variety of previous experience with caregivers, which caregivers take into account in their interactions with these species.
- Where possible, new caregivers accompany a trusted caregiver until the animal becomes comfortable with the new individual.
- Where possible and appropriate, animals become familiar with the veterinary staff, allowing close observation.

W-6 Handling and Restraint

Any necessary handling and restraint is done safely and appropriately, with minimal distress to animals, and personnel are trained in species-specific safe handling techniques/practices.

- Direct physical interaction with dangerous animals is limited to protected forms of contact, by experienced personnel, to minimize the risk of injury.
- Direct physical interaction with some ruminants/camelids may pose a risk to personnel.
    - In these cases, the sanctuary director, veterinarian or animal care manager determines the appropriate restraint methods to be used to perform essential veterinary or management activities.
    - Only fully trained personnel participate in these activities.
- Handling for veterinary care is done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, physical harm, or unnecessary discomfort, and minimizes physical and psychological stress as much as possible.
- With appropriate training, many procedures can be performed cooperatively and without anesthesia, such as examination of body parts, treatment of superficial injury, heart rate monitoring, injection administration, etc.
- Some ruminants/camelids may be conditioned to enter a squeeze cage/chute. Where this method of restraint is used, attachments for crates and squeeze cages/chutes are included in facility design or modifications.
- Where cattle chutes are used, they are designed to minimize stress and fear. Areas leading into the chutes are safe and in working order to minimize risk of injury to animals and staff. Chutes and headgates must be able to accommodate all animals housed. Modifications made to handle larger individuals should be done ahead of time and restraint carefully considered to avoid injury.
- If physical restraint or drug delivery systems must be used, the lightest and least stressful methods that are appropriate are chosen, bearing in mind the safety of staff and animal.
    - If an animal appears distressed during physical restraint, it is allowed to rest and recover before continuing the procedure.
    - Where possible, barns have pens where ruminants/camelids can be restrained and treated away from the rest of their group.
    - Where halters are used, quick release knots are employed and halters are tied to a structural beam of the enclosure. Halters are only used on animals accustomed to being handled.
    - Camels are tied low to the ground as they are at risk of strangling should they begin to sit down (these animals must sit all the way down before starting to rise again).
    - Treatment areas should have a safe/sturdy tie-off point for tied animals. Tied animals should never be left unsupervised.
- Chemical immobilization is performed only by a licensed veterinarian or by trained staff under the guidance of a licensed veterinarian, or other qualified individuals authorized by the sanctuary director or veterinarian. Specific anesthetic protocols, including record-keeping, are followed.

- Chemical sedation is not used when multiple animals are in an enclosure except in an emergency situation. In such cases, all possible precautions are taken to prevent danger to personnel and the animal being sedated.

Preferred practices:

✓ Where possible and appropriate, positive reinforcement training is used to minimize the need for chemical immobilization and to reduce stress during procedures.

W-7 Animal Transport

Animals are appropriately transported to maximize safety and minimize stress and in accordance with all applicable laws.

- Where possible, health examinations are conducted prior to an animal's arrival at the sanctuary or prior to transfer to another facility. These examinations may include a complete physical exam with attention to parasite checks, necessary vaccinations, and completion of any tests required by regulations of the receiving state/province or country.
- Health certificates and any required transport permits/tags accompany the animal when being transported interstate or internationally. Capture, restraint, and transportation methods consider the animal's temperament and behavior in order to minimize injury and distress.
- Equipment suitable for lifting, crating (where applicable) and transportation of animals kept within the sanctuary is maintained in good condition and readily available. Transport containers and vehicles are cleaned after use.
- All animals taken outside the sanctuary are kept securely at all times and managed in such a way that the animal is under control and not likely to suffer distress, cause injury or transmit or contract disease.
- Where animals are transported in vehicles without climate control, animals are not transported in severe weather; transport is timed for the coolest part of the day; there are windows that can be opened to increase ventilation as needed.
- Where livestock trailers are used to transport animals, trailers are fully enclosed; rear doors are not opened during transport to reduce the risk of panic escapes; trailers are set up to provide safe access through side doors to allow staff to provide feed and water; and animals may be safely cooled by misting/spraying with water.
    - Ruminants/camelids are not tied off in trailer but are allowed free movement on a non-slip surface.
    - Animals are grouped according to size and behavior for safety during transport.
    - Cross ties and cleats are removed or covered in hay/straw when transporting Old World camelids to reduce risk of leg pad and pedestal injuries.
    - Old world camelids' legs are not tied and there is room for all animals to lie down comfortably.
    - Ramps with traction are provided for entering and exiting the trailer.
- Where pet carriers are used to transport small ruminants, the animals are able to stand up and turn around comfortably and carriers have slip proof flooring, in addition to sufficient bedding.

ADOPTIONS AND FOSTER CARE PLACEMENTS

P-1 Adoptions

- A documented adoption policy/process is in place that includes, at a minimum:
  - Evaluation of each animal's health; behavior and temperament; companionship needs and herd grouping/relationships.
  - A recorded, detailed, legal description of each animal including any identifying marks, tattoos, brands, microchips, etc.
  - An application and thorough screening process that ensures each adopter has the knowledge, skills, and resources to manage and care for the intended animal(s) to be adopted.

- Adopted ruminants/camelids are provided with appropriate living environments (including appropriate food, water, shelter, and safe fencing), veterinary, and preventative care, all in accordance with GFAS Ruminant/Camelid Care Standards. The adopted animal's social, behavioral and companionship needs are also met.

- All adoptions are accompanied by a legally binding document that includes at a minimum:
  - A safety net for the adopted animal by specifying the recovery of the animal should the adopting party fail to abide by outlined duties and expectations.
  - Prohibiting the adopter from breeding the animal in question; selling or transferring the animal for slaughter; transferring the animal to a livestock auction; subjecting the animal to prohibited commercial uses, such as for wool, dairy, or meat.
  - The conditions under which an adopted animal can be returned to the original adoption organization or rehomed to a placement equal to or better than the current adoption placement, in accordance with GFAS Ruminant/Camelid Care Standards.
  - Specifying that the rescue/sanctuary organization be notified in the event of the death of an adopted animal. Ruminants/camelids are humanely euthanized only on the recommendation of the attending veterinarian.
  - Specifying the methods and time period(s) wherein the primary animal rescue/sanctuary facility may follow up on the adopted animal's health, welfare and progress and to ensure compliance with the terms of the agreement.

P-2 Foster Care Placements

- Animals in foster care placements are provided with appropriate living environments (including appropriate food, water, shelter, and safe fencing), veterinary and preventative care, all in accordance with GFAS Ruminant/Camelid Care Standards. The animal's social, behavioral and companionship needs are also met.
- All foster care placements provide physical facilities and levels of care equal to or above that of the primary animal sanctuary/rescue facility in accordance with GFAS Ruminant/Camelid Care Standards.

- All foster care placements are accompanied by a legally binding document specifying the duties and responsibilities of each party.
- All foster care agreements contain wording related to the recovery of the animal(s) should the foster home fail to abide by such duties and expectations, or if the foster home can no longer keep the animal(s).
- Animal foster care agreements specify the methods and time period(s), wherein the primary animal rescue/sanctuary facility may follow up on the fostered animal's health, welfare and progress and to ensure compliance with the terms of the agreement.
- Foster care agreements specify how potential adopters will be able to visit the animal and under what circumstances and conditions.
- Animal foster home caregivers have access to veterinarians able to make emergency calls, and the names and telephone numbers of those veterinarians are kept on file with the primary sanctuary/rescue facility.
- Animal foster care agreements instruct caregivers to seek professional advice regarding potential tax benefits, if any, of fostering a ruminant.
- The rescue organization has sufficient liability insurance to cover all animals located off-site from the primary animal rescue/sanctuary, and which ownership of has been retained.

RESCUE POLICIES

R-1 Rescue of Domestic Ruminants & Camelids

The rescue/sanctuary has developed guidelines for rescue work, taking into account personnel and animal safety, contingencies for caring for the animal once rescued, and any local, state or national regulations or agency cooperation required.

- Rescues and sanctuaries that assist in law enforcement investigations and seizures of animal neglect and abuse have knowledge of laws concerning abuse, neglect, abandonment and legal custody in applicable state and understand which city, county and state authorities are authorized to act.
- The rescue/sanctuary has developed working relationships with appropriate law-enforcement officials including; police departments, animal shelters, animal control officials and humane societies.
- Staff/volunteers are trained to assist in a seizure, investigate neglect complaints and provide detailed reports as required by local law enforcement.
- The rescue/sanctuary has facilities, space and resources to hold seized animals until a hearing or trial which could be for an undetermined time period.
- The rescue/sanctuary has emergency funds readily available to provide veterinary care and rehabilitation of seized animals.
- A euthanasia policy is in place to address situations where the animal's prognosis for survival based on the advice of the attending veterinarian, is too low to warrant attempting treatment.

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