

# Guidelines for the Minimum Standard of Care and Use for Horses/Mules/Donkeys (all Equids) Living in Supai, AZ

From the SAVE Foundation  
Susan K Ash, Co-Founder  
and Jennifer Johnson, DVM MS  
Diplomate ACVIM (LA)



## Guidelines for the Minimum Standard of Care and Use for Horses/Mules/Donkeys (all Equids) Living in Supai, AZ

**Purpose:** This document is being written with the intent of providing benchmarks to be met and maintained by the people of Supai, AZ in regards to the care and use of any and all Equids living in the village and surrounding area. This document applies to all animals under the care of the people of Supai, and is not exclusive only to the animals being actively used as pack string/riding/work horses.

## Table of Contents

Purpose Statement	i
Table of Contents	ii
Summary of Guidelines	iii
<u>Minimal Husbandry Standards</u>	1
Water	1
Body Condition Scoring/Assessment	2
Feed	2
Parasite Control/Deworming	2
Dental Care	3
Adequate Rest	4
Housing	4
Farrier/Hoof Care	4
<u>Veterinary/Health Care</u>	5
Vaccination	5
Wound Care	5
Castration	6
Pregnancy	6
Humane Euthanasia	6
<u>Special Considerations for Horses in Work</u>	7
<u>Additional Definitions of Abuse</u>	8
<u>Establishing Ownership/Responsible Parties</u>	8
<u>Appendix A – Body Condition Score Chart</u>	9

## Summary

### Minimum Husbandry Standards

- Potable water will be available at all times to all horses in the village, and to all horses housed at Hilltop. This includes horses housed in the temporary stalls/corrals as well as horses working on the pack strings.
- All horses in the village will be brought to and maintained at a Body Condition Score (BCS) 4/9. Horses scored at less than 4 will not be used for work of any kind. BCS goals will be met by:
  - Making available an appropriate amount of quality hay or complete feed
  - Deworming on a regular basis
  - Obtaining appropriate dental care
  - Ensuring adequate rest days
- Horses will be housed in safe, secure enclosures
- Horses will be provided with appropriate and competent farrier care on a regular basis.

### Veterinary/Health Care

- Horses should be presented to a visiting veterinarian at least annually for examination.
- Horses should receive vaccination to protect from disease
- All wounds/injuries must be tended immediately, and depending on the severity of the wound, the horse will be ineligible to work until it is healed
- Castration is encouraged. The keeping of stallions is discouraged
- Unplanned pregnancy should be avoided. Pregnant & nursing mares are ineligible for work
- Only approved, humane methods of euthanasia may be employed

### Special Considerations for Horses in Work

- Minimum age for use: 3 years
- Tack should be clean and fit appropriately
- Horses in visible distress must be pulled from work
- Lameness must not be worked
- Pack & rider weight limits must be followed

### Additional Definitions of Abuse

- Physically striking the horse with body or object
- Uncomfortable physical restraint for the purpose of discipline
- Withholding food or water

## Minimum Husbandry Standards

**Water:** It is absolutely necessary that potable water be available at all times, free choice, for every Horse, Mule, Donkey or other Equid (hereafter collectively referred to as “Horses”) in Supai. It is also absolutely necessary that free choice potable water be available at Hilltop for the horses. This includes, but is not limited to, horses that are being housed at Hilltop temporarily in the stalls/corrals near the helicopter pad as well as horses who are being used in pack strings or for riding.

- Horses that are individually tied to posts must be able to drink at all times, therefore individual buckets or feed pans should be provided. These need to be checked a minimum of twice daily and filled each time to minimize the risk that the horse runs out of water.
- Horses housed in groups should have a designated water trough per paddock/field. This needs to be checked at least daily, refilled and cleaned as needed. Clean troughs contain clear water, are free of debris and troughs should be free of algae or other dirt.
- Horses should be allowed to drink from the natural water sources while in work, as desired.
- Working horses at Hilltop should be confined in such a way that they can drink their fill at their leisure while at Hilltop. At a minimum, working horses should be offered water once upon arrival at Hilltop, once before departing Hilltop to return to Supai and once every hour while waiting at Hilltop.
- Horses housed at Hilltop (in the stalls/corrals or any other long term housing) need to be provided with a water source that is checked daily. If the responsible party will be leaving the Hilltop area, then a designated person needs to be identified to be responsible for ensuring the animals have water. Alternatively, this task could be assigned to one or two individuals who are consistently responsible for maintaining water in the stabling at Hilltop, regardless of who owns the animals contained within.

*Clean, safe water is essential to life, and access to water for all horses within Supai is absolutely non-negotiable.*

**Body Condition Scoring/Assessment:** All horses within Supai must be brought to and subsequently maintained at a Body Condition Score (BCS) of 4/9 on the Henneke Equine Body Condition Score scale (See Appendix A). Horses scored at less than 4 will be declared unfit for work and therefore may not be used as pack horses, riding horses or for any other activity, whether for profit or leisure. Horses can return to work once declared at least a BCS 4/9 by an independent assessor as assigned by the Tribal Council or other Federal Authority.

Several husbandry practices contribute to a horse's ability to maintain an appropriate and adequate BCS. These include:

**\*Feed:** All horses in Supai must be offered an adequate amount of appropriate feed material at least twice daily.

- Hay: Whenever available, horses should be offered up to 2% of their body weight in hay or other forage daily. For a 1000# horse, this equals 20# of hay. While it is recognized that obtaining and feeding hay in Supai is a challenge, it must also be acknowledged that hay and other forage is the ideal diet for horses. Therefore, it is encouraged for Tribal Authorities to collectively explore the possibility of obtaining a hay source for Supai's horses.
- Equi-Dyne Complete Feed: At the writing of this document, the majority of horses in Supai are being fed this complete feed as purchased from a vendor at Hilltop. The manufacturer (Lakin Milling) recommends horses be fed the complete feed at 2% of their body weight. For example, a 1000# horse should receive 20# of pellets a day, preferably divided into two or more feedings. However, the following conditions need to be considered when feeding the horses of Supai:
  - An underweight horse (BCS 1, 2, or 3/9) needs to be fed to its *IDEAL* weight, not to its current weight, in order to achieve a BCS of 4 or greater.
  - The manufacturer's recommendations are for horses in light to moderate work. The horses of Supai are considered to be in extremely heavy work. Therefore, many may require up to 30-35# of feed per day to achieve and maintain a BCS of 4 or greater.
- Feeding practices: Care should be taken when feeding horses to ensure that each animal gets its appropriate share. It may be necessary to separate more aggressive horses to ensure that more passive/timid/younger horses are allowed to eat their share.

**\*Parasite Control/Deworming:** A heavily parasitized horse will not gain weight. To avoid parasites, the following practices should be adopted:

- When possible, reduce stocking density (number of horses per pen/paddock/field).
- When possible, rest and rotate pastures. Pastures should be rested (unused) no less than 25% of the year, spread out if necessary.

- Provide all feed (whether hay or complete feed) in an individual tub or other container (one per horse) to reduce the number of horses eating off the ground (which can re-infect them with parasites).
- Administer commercially available paste dewormer, at a minimum, 4 times per year to every horse. Horses can be dewormed as frequently as every 2 months (six times per year). It is ideal to rotate active ingredients between each deworming, and should include at least one dose per year of the following:
  - Ivermectin
  - Fenbendazole
  - Pyrantel

Be aware that many different dewormers contain the same active ingredient. Proper deworming rotation requires attention to the label.

- The Tribal Council may want to consider setting up a Fecal Egg Count Program with a cooperating veterinarian or veterinarians. This would entail testing random and/or suspect horse's feces to determine the exact species and burden of parasites that are present within the larger Supai herd. This approach could significantly diminish the overuse of dewormer in that only horses who are parasitized are dewormed, and this can greatly reduce the likelihood that parasite resistance could develop. However, the logistical application of this program could be difficult with the fluid status of horses within the village.

**\*Dental Care:** Horses require periodic veterinary attention to their teeth in order to ensure they are able to properly chew, then subsequently properly digest their food. This enables the horse to more efficiently extract all the nutrients available from the food, as well as decreases pain while eating.

- Every horse in Supai should be examined by a veterinarian for dental disease at a minimum of once every two years.
- Horses with a BCS less than 4/9 should be examined by a veterinarian for dental disease as soon as possible after their classification, at a minimum within 6 months.
  - Owners of these horses must make a good faith effort to make their horses available to be seen by the visiting veterinarian. Failure to do so will be considered a violation of these conditions.
- Horses who are scored at a BCS of less than 4 need to continue to be examined by a veterinarian for dental disease every 6 months until a BCS of 4 is achieved, at which time they will be subject to the every 2 year exam.
  - At any time should a horse lose body condition and be re-classified as less than a 4, regardless of their previous score, they are subject to examination every 6 months until such time that they are re-classified as a 4 or higher.

**\*Adequate Rest:** Horses are not permitted to be used for packing or excessive riding more than 5 days of every 7 days. Horses that are used for light riding around the village may be used daily provided their daily use (active work) does not exceed 5 hours per day. Should their use exceed 5 hours per day, then their use is only permitted for 6 days of every 7 days.

**Housing:** Reasonable effort should be made to provide safe, secure enclosure free of excessive materials/refuse/debris that can cause wounds or injuries while in pasture. Horses should be housed in groups according to age, sex, size and temperament, with the goal of minimizing horse-on-horse aggression and injury. Stallions should be confined away from mares with secure fencing to prevent escape and accidental breeding. Fences should be kept in good repair to prevent escape and injury. Natural or man-made shelter should be available to afford protection from the elements.

Tying horses individually should be avoided as a housing or segregation strategy. If it is absolutely necessary that a horse be tied, it should be secured to a solid object that can not be moved if the horse should pull back. The length of the rope should be long enough as to not overly restrict the horse's movements, but not so long that the horse could become tangled. Ideally the horse will be fit with a breakaway halter or lead rope so that it does not injure itself should it panic and pull. All horses tied should be done so in a location that provides protection from the elements, allows for access to water, and does not put the animal at risk for injury from dogs or other animals, unable to defend itself or escape. Any single horse may not be tied as a method of housing for more than 24 hours at a time.

**Farrier/Hoof Care:** All horse of Supai, regardless of their work status, should have regular hoof care. On average, a horse needs its hooves trimmed every 8 weeks. Shod horses need their shoes reset or removed if no longer in use. It is not necessary to use a certified farrier to provide this care however the individual doing the work should be familiar with farrier work. If a horse has proven to be too dangerous to work on, reasonable attempts to coordinate safe and appropriate field sedation/anesthesia should be made with the visiting veterinary teams to allow for a farrier to trim these horses at least 1-2 times per year.

## Veterinary/Health Care

In addition to the dental and deworming care referenced above, all horses in Supai should be made available for veterinary examinations whenever possible, specifically if the owner has any concerns. Routine physical examinations (once per year) can help detect problems before they cause the horse major health issues, and can also help identify factors that may cause the horse to lose body condition and be classified as deficient in the BCS Scoring.

**Vaccination:** Each horse in Supai should receive at least once per year, and no more than twice per year, an appropriate dose of vaccine(s) for the following illnesses:

- Equine Influenza
- Equine Rhinopneumonitis
- Eastern Equine Encephalitis
- Western Equine Encephalitis
- West Nile Virus
- Tetanus

Horses can be vaccinated for additional diseases at the discretion of the visiting veterinary professional, or in the face of emergent disease. Some of these additional diseases include, but are not limited to Rabies, Venezuelan Equine Encephalitis, Potomac Horse Fever and/or Botulism. Horses do not need to be vaccinated by a veterinarian. It is acceptable for an individual owner to purchase and administer the vaccines.

**Wound Care:** All wounds should be tended as soon as possible regardless of the work/use status of the horse. Depending on the severity and location of the wound, appropriate care may include topical ointments, oral antibiotics, stitches or the use of bandages. The following wounds will make a horse ineligible for work until they are resolved:

- Any wound that is actively bleeding. If a horse is injured on the trail, appropriate first aid must be administered. It is NOT appropriate to simply turn the horse loose on the trail to fend for itself.
- A leg wound of any severity that is causing lameness
- An eye wound of any severity. If the horse is holding the eye even partially shut, it may not be used. It is permissible to use a horse that is blind in one eye, or has lost an eye, provided that the condition that caused the blindness is resolved and not causing any ongoing pain or discomfort for the horse.
- Any wound deep enough that underlying tissue (tendon, bone, muscle) is clearly visible through the skin.
- Any wound that is actively infected as evidenced by excessive swelling and/or drainage of material (including but not limited to puss, blood, serum)

- Saddle/pack/girth/tack sores are prohibited. The use of any horse with sores or abrasions in an area where a pack, saddle, girth, rear girth, bridle, halter, rump strap, breast plate either caused or may worsen the wound will be considered a violation of these terms.
- Flesh wounds/abrasions NOT in an area where packing gear/riding tack makes contact (neck, head, rump excluding rump strap, chest excluding breast plate, belly excluding girth) may not exceed a total of 18 square inches total (about the size of a US \$1 bill). This is a cumulative measure of all flesh wounds/abrasions in non-tack areas.

**Castration:** It should be encouraged that all owners of stallions consider castration for their horses. This practice should only be performed by a veterinarian under appropriate field sedation/anesthesia. It should be encouraged for all horses to be gelded before they are 2 years of age to minimize risk to the horse.

**Pregnancy:** Any horse known to be pregnant is unavailable for work after 6 months of pregnancy, or as soon as it is realized she is pregnant. She may not return to work until her foal is weaned at 4-6 months of age. It is unacceptable for the foal to be left on its own all day while the mare packs, and also unacceptable for the foal to be expected to accompany its working mother on the trail. Reasonable attempts at preventing unwanted pregnancies should be made at all times. It is especially imperative that mares under the age of three, and over the age of 20 be protected from pregnancy.

**Humane Euthanasia:** In the event that a horse suffers from a wound, injury or illness that the responsible party is unwilling or unable to treat, humane euthanasia needs to be employed to reduce the horse's pain and suffering. Owners are encouraged to seek assistance from Federal Law Enforcement officers to employ the gun shot method of euthanasia. Other acceptable methods of humane euthanasia include administration of licensed euthanasia medications or overdose of veterinary anesthetic. These options must be performed by a veterinarian. Other methods of euthanasia are not acceptable and will be considered animal abuse. These actions may include, but are not limited to:

- Blunt force trauma to the head or any other body part
- Exsanguination
- Suffocation
- Cervical dislocation (breaking the neck)
- Inhalation of any agents
- Injection of any substance, medical or otherwise, by anyone other than a veterinarian
- Electrocutation
- Poisoning

For complete guidelines pertaining to permitted methods of humane euthanasia, consult the AVMA Guidelines for the Euthanasia of Animals:

<https://www.avma.org/KB/Policies/Documents/euthanasia.pdf>

## **Special Considerations for Horses in Work**

For the purposes of this section, it is understood that work is being defined as use in the pack strings or as a riding horse to travel from Supai Village to Hilltop and back, including horses that are used to deliver supplies to the campground before returning to the village.

- Minimum Age for Use: 3 years.
- Reasonable attempts must be made to use well-fitting and clean gear to prevent saddle sores. The presence of saddle sores makes the horse ineligible for work.
- Horses visibly in distress must be immediately pulled from work. This includes horses in respiratory distress (open mouth breathing, excessive effort), horses that are shaking, stumbling, appear uncoordinated, trying to lie down or collapse. These horses should be unloaded, their tack removed and water provided. While a distressed horse may temporarily be left on the side of the trail, arrangements must be made for the horse to return to the village and receive appropriate care. At no time is it acceptable to completely abandon a distressed horse on the side of the trail.
- Lameness of any kind makes a horse ineligible for work.
- Packers must adhere to the posted 150# weight limit.
- Riders of horses should not exceed 300#.
- Horses traveling the trail should do so at a walk or trot greater than 80% of the trip. Horses should not be expected to lope/canter/gallop more than 20% of the trip. This includes the entire round trip. While it is acknowledged that the last 1.5 miles of the trail to Hilltop is extremely steep and physically taxing, it is unacceptable for the horses to reach Hilltop physically exhausted. Care should be taken to move the horses down the trail in such a way that there is enough energy reserved for this strenuous climb.

## **Additional Definitions of Abuse**

Failure to abide by the standards outlined in this document will be considered abuse of an animal. In addition, abuse will be considered any malicious, harmful, painful, excessively punitive or aggressive behavior or riding, including, but not limited to, the following:

- Striking a horse in the head with an inanimate object or human body part (punching, slapping, kicking)
- Excessive use of tack (bits, shanks, spurs) resulting in blood
- Striking a horse on the body more than once for the purpose of discipline
- Depriving the horse of food or water
- Tying the horse in an unnatural or uncomfortable position for any amount of time for any purpose, including discipline
- Deliberately causing wounds or injuries of any kind
- Using a horse for any task (riding, work, packing) when it fails to meet the minimum standards outlined by this document
- Any attempt to euthanize a horse by a method other than those outlined by this document
- A failure to make a reasonable attempt to obtain humane euthanasia for a horse that is injured, sick or otherwise in obvious, untreatable distress

## **Establishing Ownership/Responsible Parties**

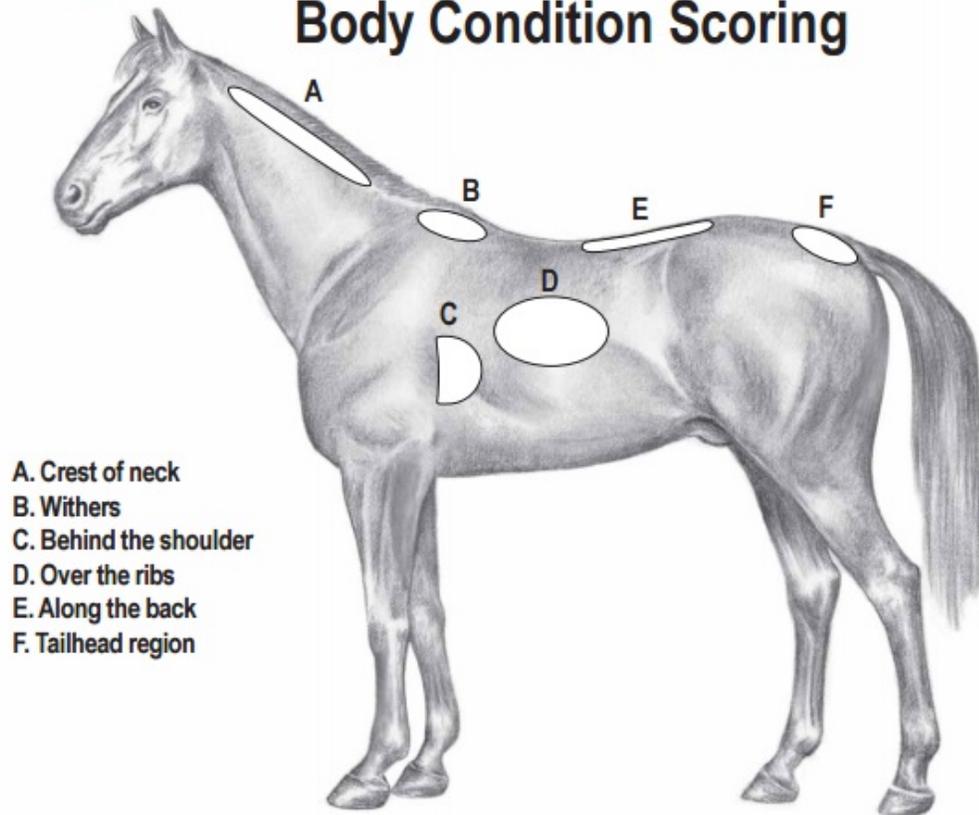
The owner is considered to be the individual or individuals who has the majority control over the decision making process regarding the horse's care and use. It will be the owner's responsibility to ensure that the horse has access to food, water, farrier and veterinary care. Even in the event that the owner should place another individual directly responsible for the day-to-day care of the horse, it is still ultimately the owner's responsibility to ensure these needs are being met.

While the horse is being used for work, it is the responsibility of the specific pack string overseer to ensure that the horse is fit for work, and remains so throughout the work day. It is also this individual's responsibility to ensure adequate access to water while at Hilltop.

## APPENDIX A



### Body Condition Scoring





## Description of Body Condition Scores (Scores 1-9)

1. **Poor:** Horse is extremely emaciated. Backbone, ribs, hipbones, and tailhead project prominently. Bone structure of the withers, shoulders, and neck are prominent. No fatty tissues can be felt.
2. **Very Thin:** Horse is emaciated. Slight fat covering over vertebrae. Backbone, ribs, tailhead, and hipbones are prominent. Withers, shoulders, and neck structures are discernible.
3. **Thin:** Fat built up about halfway on vertebrae. Slight fat layer can be felt over ribs, but ribs easily seen. The tailhead is prominent, but individual vertebrae cannot be seen. The hipbones, withers, shoulders, and neck structures are faintly discernable.
4. **Moderately Thin:** Slight ridge along back. Faint outline of ribs can be seen. Fat can be felt around tailhead. Hip bones not obviously discernable. Withers, neck, and shoulders not obviously thin.
5. **Moderate:** Back is level. Ribs can be easily felt, but not seen. Fat around tailhead beginning to feel spongy. Withers are rounded and shoulders and neck blend smoothly into the body.
6. **Moderately Fleshy:** May have a slight crease down the back. Fat around the tailhead feels soft. Fat over the ribs feels spongy. Fat beginning to be deposited along the sides of the withers, behind the shoulders, and in the crest of the neck.
7. **Fleshy:** May have a crease down the back. Individual ribs can be felt, but noticeable fat deposition over the ribs. Fat around tailhead is soft. Noticeable fat deposited along the withers, behind the shoulders, and in the crest of the neck.
8. **Fat:** Crease down the back is prominent. Ribs difficult to feel. Fat around tailhead prominent. Area along withers filled with fat. Area behind shoulders filled with fat. Prominent crest of neck. Fat deposited along the inner buttocks.
9. **Extremely Fat:** Obvious crease down back. Fat is in patches over rib area, with bulging fat over tailhead, withers, neck, and behind shoulders. Very prominent crest of neck. Fat along inner buttocks may rub together. Flank is filled in flush with the barrel of the body.

Adapted from Henneke *et al*, 1983



1



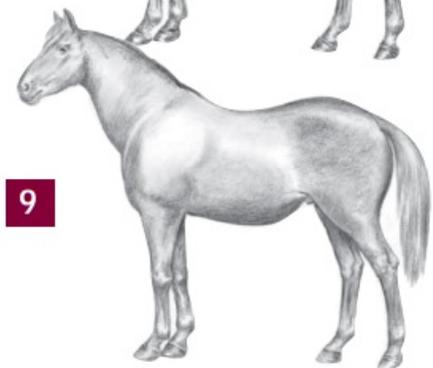
3



5



7



9

Virginia Cooperative Extension