



Responsible Alpaca Standard 1.0

User Manual

RAF-201c-V1.0-2021.04.20





©2021 Textile Exchange. This publication is protected by copyright. All rights are reserved. Written permission by Textile Exchange is required for reproduction in entirety or portion.

The RAF-101c-V1.0 is effective as of April 20th, 2021.

Cover photo credit: Herry Pradana (cover photo), Michell & Cia.S.A. (page 167), Callie Weldon (all other photos)

English is the official language of the Responsible Alpaca Standard. In any case of inconsistency between versions, reference shall be made to the English version.

Disclaimer

Although reasonable care was taken in the preparation of this document, Textile Exchange and any other party involved in the creation of the document HEREBY STATE that the document is provided without warranty, either expressed or implied, of accuracy or fitness for purpose, AND HEREBY DISCLAIM any liability, direct or indirect, for damages or loss relating to the use of this document.

This is a voluntary procedures document and is not intended to replace the legal or regulatory requirements of any country.

Copyright

This publication is protected by copyright. Information or material from this publication may be reproduced in unaltered form for personal, non-commercial use. All other rights are reserved. Information or material from this publication may be used for the purposes of private study, research, criticism, or review permitted under the Copyright Act 1976.

Any reproduction permitted in accordance with the Copyright Act 1976 shall acknowledge the Responsible Alpaca Standard V1.0 as the source of any selected passage, extract, diagram, or other information.

The Responsible Alpaca Standard will undergo a revision process at least every five years. The next revision is tentatively scheduled to begin in 2025 for completion in 2026. You may submit feedback to the standard at any time; send to ResponsibleWool@TextileExchange.org. Points of clarification may be incorporated into supplementary and guidance documents prior to 2025. More substantive feedback or suggested changes will be collected and reviewed as part of the next revision of the document.

Document Revision History

Responsible Alpaca Standard – V1.0, released April 20th, 2021



Contents

Introduction	6
About the Responsible Alpaca Standard User Manual	6
About the Responsible Alpaca Standard	6
About Textile Exchange	6
How to Use This Document	8
Section A – Get to Know the RAS 1.0	11
A1.What is the Responsible Alpaca Standard?	11
A2.How does certification work?	11
Section B – Animal Welfare Criteria	15
AW1. Nutrition	15
AW1. Nutrition: Guidance Notes and Templates	20
<i>Body Condition Scoring Guidance</i>	21
<i>Body Condition Score Record Template</i>	29
AW2. Living Environment.....	30
AW3. Animal Management	39
AW3. Animal Management: Guidance Notes and Templates	55
<i>Inspection Frequency Guidance</i>	56
<i>Pain Relief Guidance</i>	58
<i>Lameness Scoring Guidance</i>	62
<i>Shearing Guidance</i>	64
<i>Euthanasia and On-farm Slaughter Guidance</i>	67
<i>Castration Standard Operating Procedure</i>	76
<i>Herd Health and Welfare Plan Template</i>	78
<i>Treatment and Vaccination Record Template</i>	89
<i>Injury Record Template</i>	90
<i>Euthanasia Plan Template</i>	91
AW4. Handling and Transport.....	96
AW4. Handling and Transport: Guidance Notes and Templates	99



<i>Transport Guidance</i>	100
TG1. Responsibilities, Competency, and Stockmanship	100
TG2. Documentation	100
TG3. Fitness for Travel	100
TG4. Separation	101
TG5. Preparation for Transport.....	102
TG6. Transport vehicles and facilities for livestock	102
TG7. Loading and Unloading	103
TG8. Recommended space allowance.....	103
TG9. Journey times, food, water, and rest	104
TG10. Monitoring and Records.....	105
AW5. Management, Plans and Procedures	107
AW5. Management, Plans and Procedures: Templates.....	110
<i>Mortality Record Template</i>	111
<i>Emergency Plan Template</i>	112
<i>Contractor Declaration</i>	113
Section C – Land Management Criteria.....	118
LM1. Soil.....	118
LM1. Soil: Guidance Notes and Templates	122
<i>Guidance Note: Soil Management Practices to Reduce Soil Erosion</i>	123
<i>Monitoring Point Guidance for Individual Farmers and Farmer Group Members.</i>	125
LM2. Biodiversity and Water	129
LM2. Biodiversity: Guidance Notes and Templates.....	139
<i>Biodiversity Management Plan</i>	140
LM3. Fertilizers.....	150
LM4. Pesticides.....	152
Section D – Social Welfare Criteria.....	156
SW1. Hiring Practices	156
SW2. Child Labor	158
SW3. Working Conditions and Conduct	160
SW4. Freedom of Association and Collective Bargaining.....	162



SW5. Wages and Benefits	163
SW6. Communities	164
SW7. Health and Safety	165
Section E – Farm and Communal Farmer Group Certification	168
E1. Communal Farmer Group Requirements	168
E1. Communal Farmer Group Requirements: Guidance Notes and Templates	169
<i>Herd Health and Welfare Plan</i>	170
<i>Land Management, Soil Health and Biodiversity Plan</i>	183
Appendix A – Slaughter Site (Optional)	205
S1. Management and Training	205
S2. Casualty Animals	207
S3. Preslaughter Handling	208
S4. Slaughter Equipment	210
S5. Stunning and Killing Methods	211
S6. Chain of Custody	213



Introduction

About the Responsible Alpaca Standard User Manual

The Responsible Alpaca Standard (RAS) User Manual is intended to support farms and suppliers in the implementation of the Responsible Alpaca Standard. This is a separate document from the Responsible Alpaca Standard document.

About the Responsible Alpaca Standard

The Responsible Alpaca Standard is an international, voluntary standard that addresses animal welfare in the alpaca supply chain and chain of custody of alpaca fiber material from certified farms to the final product.

Individual sites are certified by independent third-party certification bodies using annual audits. Material is tracked from the farm to the final product using transaction certificates, following the requirements of Textile Exchange's Content Claim Standard (CCS). For more information or to apply for certification, please visit: ResponsibleAlpaca.org.

The goals of the Responsible Alpaca Standard are to:

- Recognize the best practices of farmers;
- Ensure that alpaca fiber comes from farms with a progressive approach to managing their land, and from alpacas that have been treated responsibly;
- Create an industry benchmark that will drive improvements in animal care, land management, and social welfare where needed; and
- Provide a robust chain of custody system from farm to final product so that consumers are confident in the alpaca fiber in the products they choose is truly RAS.

About Textile Exchange



The Responsible Alpaca Standard is owned and managed by **Textile Exchange**. Textile Exchange is a global nonprofit that creates leaders in the sustainable fiber and materials industry. The organization develops, manages, and promotes a suite of leading industry standards as well as collects and publishes vital industry data and insights that enable brands and retailers to measure, manage, and track their use of preferred fiber and materials.

With a membership that represents leading brands, retailers, and suppliers, Textile Exchange has, for years, been positively impacting climate through accelerating the use of preferred fibers across the global textile industry and is now making it an imperative goal through its [2030 Strategy: Climate+](#). Under the Climate+ strategic direction, Textile Exchange will be the driving force for



Responsible Alpaca Standard 1.0
© 2021 Textile Exchange



urgent climate action with a goal of 45% reduced CO₂ emissions from textile fiber and material production by 2030.



How to Use This Document

This document includes:

- guidance on compliance to the standard requirements;
- additional information, that is not required for compliance, but may be useful when planning alpaca management;
- good practice documents for specific topics such as body condition scoring and euthanasia; and
- templates for written management plans and records.

These are intended to make it easier for the farmer to understand and integrate the requirements of the RAS into practice.

Specific standards guidance and additional information follow the standard to which they apply. Guidance documents and templates for records and plans are included directly after the relevant section of the standards to which they relate.



Guidance Sections

Animal Welfare

In the guidance section, the animal welfare, land management and social requirements have been listed with additional comments on what compliance with these requirements will look like. Explanation of documents required, templates that may be used, and information to be collected in your records are all listed here.

Additional good practice guidance and links to further information is also provided for some requirements.



Templates

Plan Templates

Many of the requirements in the Responsible Alpaca Standard require that a written plan be available for the auditor to review. The plans are not required to look exactly like the templates



in this document, but the templates are helpful guidelines to make sure your written plans have all the required elements. If you do not already have a plan, these should help you get started.

Record Templates

Records of animal husbandry procedures, illness, shearing, mortality, and other events on the farm are required to be kept by the farmer. This allows the auditor to get a better idea of how the farm handles these issues. Again, it is not necessary for your records to look exactly like the templates in this document, but you should be recording at the same level of detail. If you do not already keep records, feel free to print out these templates for your own use.





Section A – Get to Know the RAS 1.0

A1. What is the Responsible Alpaca Standard?

The RAS includes five important elements:

1. Animal welfare verification at farms.
 - Farms are audited to verify that animals are treated well and that all requirements are followed.
2. Land management
 - Progressive methods of land management are practiced on RAS farms, protecting soil health, biodiversity and native species.
3. Social welfare
 - Key social welfare criteria are verified on farms.
4. Chain of custody of alpaca fiber from the source to the final product.
 - Documents track the materials through each stage in the supply chain to make sure that products with alpaca fiber from RAS-certified farms can be identified.
5. Product labelling.
 - A logo is provided to allow companies to identify products for consumers that want to purchase products with alpaca fiber that has come from RAS-certified farms.

A2. How does certification work?

The first step in the supply chain that shall be certified is the farm. These may be individual farms or a group of farms. Each company (including the farms, mills and manufacturers and sometimes the brand) is required to be certified on an annual basis.



Certification is performed by an independent third-party organization called a certification body. You can find a list of Certification Bodies approved to the RAS on our website: TextileExchange.org/Standards.

Steps of Certification:

1. Determine eligibility: individual Farm Certification, Group Certification, or Communal Farmer Group. Farm groups and communal farm groups can be co-operatives, associations or similar organizations. The Farm Group or Communal Farm Group can be self-organized and run by members or organized by a separate entity such as a trader or a broker. During the certification process, the legal entity that is managing the group will liaise with the Certification Body.
2. Contact an approved Certification Body (CB).
3. Fill out the application form from the CB.
4. The CB will respond with an offer that includes their fee structure. It's a good idea to apply with more than one CB to compare prices and timeline.
5. Select an offer and sign a contract with the CB.
6. Read this document carefully. Prepare as well as you can; this will save time and money during the audit.
7. On-site audit is conducted



Individual Farm Certification:

- The CB will send an auditor to your operation(s) to interview staff, and review documents and procedures against the requirements of the standard. This is the on-site audit. In your first year, this will be scheduled. In following years, it may be announced or semi-announced.

Farm Group Certification:

- The Internal Control System (ICS) will carry out internal annual inspections of each group member on their farm.
- The ICS will work with the CB to conduct a risk assessment, which informs the number of farms needed to be inspected during the audit. The CB will audit the ICS and conduct on-site audits of a sample of farms.

Communal Farm Group:

- The ICS will carry out internal annual inspections of each group member on their farm.
 - The ICS will work with the CB to conduct a risk assessment, which informs the number of farms needed to be inspected during the audit. The CB will audit the ICS and the Communal Farmer Group plans and conduct on-site audits of a sample of farms including the use of animal-based assessments. For more information on Communal Farmer Group see Section E.
8. A report of the audit will be sent to the CB office; a separate person will review them and make a final certification decision. If you fail to meet any requirements designated major or minor, you will be given a period of time to correct them. If you fail to meet critical requirements at your first audit you will not be certified. If you fail to meet critical requirements at subsequent audits you will be suspended.
 9. Once all corrections have been completed, the CB will issue an RAS Scope Certificate. This certificate will have to be renewed yearly, with an audit each time.
 10. The CB may visit without advance notice, to make sure that you are still following the requirements.
 11. Supply chain companies should request Transaction Certificates when you ship certified goods, in order to show your customers that the material is certified. Goods shipped without a Transaction Certificate are not considered certified.





Section B – Animal Welfare Criteria




AW1. Nutrition






Desired outcome: Access to sufficient feed and water suited to the animals' age and needs to maintain normal health and to prevent prolonged hunger, thirst, malnutrition or dehydration.

Number	Requirement	Level
AW1.1	Alpacas shall have access to adequate nutrition, suited to the animals' age and needs, to maintain normal health and to prevent prolonged hunger or malnutrition.	C
	AW1.1.1 Feeding shall be addressed in a management plan. <i>See AW5.7 for emergency feed and water provisions.</i>	Mi
	The management plan does not need to be written; it can be communicated verbally.	
	<p>It is critical to determine stock rates on a farm and/or paddock basis that balance the nutritional needs of the alpaca, long-term productivity (profitability), and environmental sustainability. Feed planning enables you to objectively match pasture supply and animal feed demands on your whole farm during the year.</p> <p>The development of feed management plans is specific to each region, climate and farming system: plant types, growth rates and seasonal conditions will vary. For this reason it is best to work with a local expert, or use one of the many tools that are available online.</p> <p>The basic element of a plan will include:</p> <ul style="list-style-type: none"> • Understanding the types of palatable vegetation on your land and their nutritional value; • Determining the amounts that are available through the different times of the year; 	





Number	Requirement	Level
	<ul style="list-style-type: none"> • Determining the number of grazing days in a land area and the grazing and nutritional needs of your alpaca at different points in their production cycle; • Setting up a rotation; • Compiling a whole farm feed budget; matching the nutritional needs of the alpaca to amount of available nutrition through grazing and identifying any need for supplemental feeds. <p>The information taken from monitoring points will help in the development of this plan. See the RAS Monitoring Point Guidance for more information.</p>	
AW1.2	Alpacas shall have an adequate supply of clean, safe drinking water each day.	C
	Alpaca should have free access to clean, safe drinking water unless deprivation meets the requirements detailed in AW1.7.	
AW1.3	The body condition of alpacas shall be routinely monitored as part of the farm's management system to confirm health of the animals.	Ma
	AW1.3.1 Farm workers shall be able to measure the Body Condition Score (BCS) of alpacas.	Ma
	AW1.3.2 If BCS scoring identifies evidence of inadequate nutrition, appropriate action shall be taken to return the animals to good health. These actions should be recorded.	Ma
	<p>Alpaca that have BCS below 2 are generally accepted to be in a state of inadequate nutrition.</p> <p>For most accurate results, carrying out BCS requires alpaca to be handled, however scores can be visually assessed if carried out within a few weeks of shearing.</p> <p>Actions to return animals to good health may be applied on an individual, group or flock basis</p>	
	<p>See Body Condition Scoring Guidance</p> <p>Routine monitoring requires that at least a sample of alpaca are assessed several times through the year. Ideally farms should get in the</p>	



Number	Requirement	Level
	habit of doing an assessment every time alpaca are gathered and handled for other management tasks.	
	See Body Condition Scoring Record Template	
AW1.4	Feed shall be stored properly.	Mi
	AW1.4.1 Hazardous material shall not be stored near feed storage areas.	Mi
	This applies to both stored forages (e.g. hay) and concentrate or grain based feeds. Proper storage ensures that feed maintains its quality and palatability. Poorly stored feed that becomes moldy, contaminated by birds or rodents or otherwise compromised can cause a risk to alpaca's health.	
AW1.5	Routine checks and monitoring shall be conducted regularly to ensure feed and water quality and quantity is maintained.	Ma
	The frequency of checks will depend on the source and availability of feed and water. Whenever alpacas are inspected, feed and water should also be checked. See also AW3.1 and the inspection frequency guidance note.	
	AW1.5.1 Equipment used to deliver feed and water shall be cleaned and maintained in good working order and any problems promptly rectified.	Ma
	AW1.5.2 Water points supplied from troughs, drinkers or natural water sources shall be clean and be of good quality and an accessible level at all times.	Ma
AW1.6	Changes in diet shall be introduced gradually.	Mi
	AW1.6.1 Alpacas shall be introduced to crop grazing and or supplementary feeding at a rate that allows them to adapt to the new feed.	Mi



Number	Requirement	Level
AW1.7	Alpacas shall only be deprived of feed and water for reasonable management practices (such as shearing or slaughter). Deprivation periods shall be no longer than 6 hours.	Ma
	AW1.7.1 Alpacas held in sheds or yards for management practices (such as shearing) shall be monitored for signs of distress during time held off feed and water and remedial action taken.	Ma
	<p>Alpaca must not show signs of distress when deprived of feed and water. Signs of heat stress include:</p> <ul style="list-style-type: none">• Panting• Rapid breathing• Weakness/difficulty standing <p>Remedial action for heat stress includes moving the alpaca to a cool shaded areas with good air circulation, and offering water. Note that spraying the top of the alpaca’s fleece with water stops air moving through the fleece and may be counterproductive. Wetting the belly of the animal may be more effective.</p> <p>Signs of cold stress include:</p> <ul style="list-style-type: none">• Shallow breathing• Shivering• Huddling together with other alpacas <p>Unlike sheep, alpaca do not have a high grease content in their fleece and heavy winds and rain can therefore more easily penetrate the fleece which will result in rapid heat loss.</p> <p>Outside of extreme wet and windy weather young alpacas, who tend to have little body fat, and alpacas that have just been sheared are most likely to suffer from cold stress rather than those animals in the period of feed/water deprivation prior to shearing. Remedial action for cold stress includes moving alpaca to a sheltered area, putting coats or capes on individual alpacas and feeding them.</p>	
	The combination of heat and humidity offers the greatest risk of causing stress to alpaca. To avoid alpaca suffering distress when they are deprived of feed and water:	



Number	Requirement	Level
	<ul style="list-style-type: none">Plan periods of deprivation and activities associated with this – such as shearing – around local weather forecasts to avoid deprivation in extreme weather conditionsBe aware that young animals, geriatric animals and those with compromised nutritional or health status are most at risk of suffering distress during deprivation periods. Try and keep those animals separate.Provide shade/shelter as appropriateAdjust stocking density in pens according to air temperature. <p>In hot temperatures ensure that air can move in and around any buildings/structures where alpaca are held.</p> <p>AW1.7.2 Animals in ill health or poor condition shall not be deprived of food or water until they recover.</p>	Ma



AW1. Nutrition: Guidance Notes and Templates



Guidance Notes

- [Body Condition Scoring Guidance](#) (Corresponding with AW1.3)



Templates

- [Body Condition Score Record Template](#) (Corresponding with AW1.3)



Body Condition Scoring Guidance

Corresponds with AW1.3

Introduction

The RAS requires that the body condition of alpaca is routinely monitored and recorded as part of the farm's management system to confirm health of the alpaca. This document provides guidance on how to conduct Body Condition Scoring of alpaca. The assessment guidance is also applicable to RAS auditors.

Description

Body condition scoring is a standardized method to estimate the amount of fat on an alpaca's body. The body condition score measures the balance between intake and expenditure of energy and is known to be related to feeding motivation. Body condition can be affected by a variety of factors such as food availability, reproductive or productive status, weather conditions, parasites, dental problems, diseases and feeding practices.

How to assess (individual)

Although it may be possible to get some idea of Body Condition by visual assessment of an alpaca with a full fleece, the most accurate assessment requires alpacas to be handled. Body Condition Score (BCS) should be assessed on a restrained alpaca. Body condition is assessed by palpation of the spine in the lumber region just after the last rib. Feel for the horizontal and vertical processes and assess the amount of fat and muscle overlying the bones. The diagram below shows the points on the body where alpacas should be handled to assess BCS

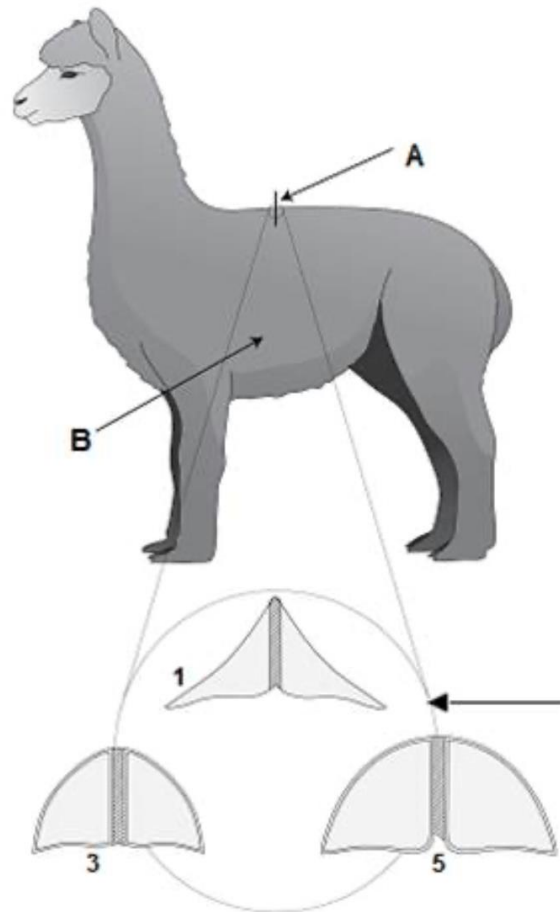


Figure 1 Credit: NADIS, Tim Potter BVetMed PhD MRCVS

Article: <https://www.nadis.org.uk/disease-a-z/camelids/the-healthy-alpaca/>

There are two main sites for body condition scoring alpacas. The main area to palpate is over the mid-back, halfway from the neck to the tail (point A in the picture of an alpaca above). At this point you are feeling the muscle coverage either side of the vertebrae. The three smaller diagrams below the alpaca show how muscle coverage at this point relates to BCS score. The secondary point (B in the picture above) is the area over the ribs where you are feeling for fat cover. In an animal of BCS 2.5 you will just be able to feel the ribs.



How to condition score alpacas

This online video demonstrates how to carry out BCS for alpacas.

<https://www.ukalpacavet.com/resources/body-condition-scoring-alpacas/> [Note this video uses the score 1 to 10 rather than 1 to 5. A score of 4 in this video would be equivalent to a score of 2 in RAS]

This online document describes body condition scoring and gives details of the scores from 1 to 5: <https://www.incaalpaca.co.uk/wp-content/uploads/2014/03/4bodycondition.pdf>

How to assess (herd)

Randomly select a representative sample of alpacas to assess for body condition scoring. It is recommended that the number of animals that are assessed should be at least the minimum sample number from the table below. The animal should be standing in a relaxed position and should not be tense or crushed by other animals. Each assessment should only take a matter of seconds.

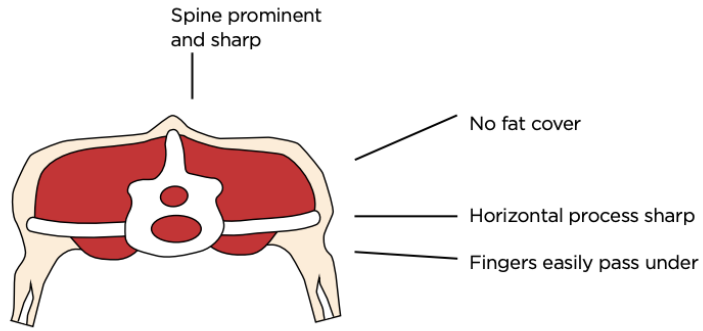
Number of adult females in herd/flock	Suggested sample	Minimum sample
<15	All animals	All animals
15-19	13	13
20-24	17	16
25-29	20	19
30-34	23	21
35-39	26	24
40-44	29	26
45-49	31	28
50-59	33	29
60-69	37	32

Number of adult females in herd/flock	Suggested sample	Minimum sample
70-79	41	35
80-89	44	37
90-99	47	39

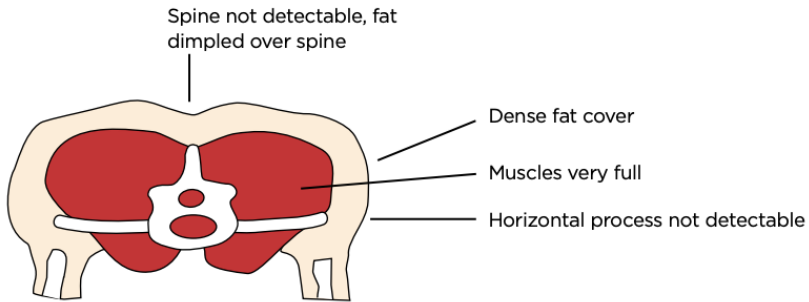
Sampling table from the Animal Welfare Indicators (AWIN) Protocol

How to score

The BCS described by Russell et al. (1969, J Agric Sci, 72, 451-454) can be used. For welfare purposes animals are considered thin if they score below 2.0 on this scale, emaciated if they are at or below 1.0, and fat if they are above 4.0. The principle of this system is used across all breeds and types of sheep, goats and alpacas.

Score 1	 <p>The spinous and transverse processes are prominent and sharp. The fingers can be pushed easily below the transverse bone and each process can be felt. The loin is thin with no fat cover.</p>
----------------	---

<p>Score 2</p>	<p>Spine prominent and smooth</p> <ul style="list-style-type: none"> Thin fat cover Muscles medium depth Horizontal process rounded Fingers go under with pressure <p>The spinous processes are prominent but smooth, individual processes being felt only as corrugations. The transverse processes are smooth and rounded, but it is still possible to press fingers underneath. The loin muscle is a moderate depth but with little fat cover.</p>
<p>Score 3</p>	<p>Spine smooth and rounded</p> <ul style="list-style-type: none"> Moderate fat cover Muscles full Horizontal process smooth and rounded Fingers need hard pressure to find ends <p>The spinous processes are smooth and rounded; the bone is only felt with pressure. The transverse processes are also smooth and well-covered, hard pressure is required with the fingers to find the ends. The loin muscle is full and with moderate fat cover.</p>
<p>Score 4</p>	<p>Spine only detected as a line</p> <ul style="list-style-type: none"> Thick fat cover Muscles full Horizontal process cannot be felt

	<p>The spinous processes are only detectable as a line. The ends of the transverse processes cannot be felt. The loin muscles are full and rounded and have a thick covering of fat.</p>
<p>Score 5</p>	<div style="text-align: center;">  </div> <p>The spinous and transverse processes cannot be detected even with pressure; there is a dimple in the fat layers where the processes should be. The loin muscles are very full and covered with very thick fat.</p>

Key scores

Optimum BCS will vary across the production cycle and type of alpaca raised, but in general female alpacas that score between 3 and 4 will provide the optimum production and profitability. Low (<2) and high (>4) BCS have the potential to negatively impact production factors such as ovulation rate, embryonic loss, conception rates and return to service and also carry a higher risk of pregnancy toxemia. Cria that are too thin (<2.5) will have poor production, increased risk of mortality and poor reproduction. No alpaca should score less than 2 without action being taken. The recommended BCS for different production stages are as follows:

- Breeding BCS 3 to 4
- Early pregnancy maintains BCS at 2.5 to 4
- Birthing aim for BCS 3 to 3.5
- Weaning BCS minimum 2.0.

How often to assess BCS

AW1.3 requires that alpaca are routinely monitored for BCS. It is recommended that alpaca have their BCS assessed at least three times during the production cycle, for example as follows:



- In mid-pregnancy, to allow for any adjustment in feeding for female alpaca in poor condition prior to the period of increased nutritional need in late pregnancy.
- In late pregnancy, after the previous year's cria has been weaned so that female alpacas of lower BCS can be offered supplemental feed in lactation if necessary.
- In early lactation, to ensure that the increased energy demand of feeding a cria is not causing females to lose body condition.



How to record BCS

A random sample from the herd can be used to get an average condition score that can be used to help inform decision making. A simple chart (see example below) can be used to record the BCS of a group and any shifts that occurs between recording sessions. Record the body condition of each alpaca with an X on the chart. The median score of the flock is the score at the middle of the distribution. A printable chart is available in the Records section.

				X				
				X				
			X	X				
			X	X				
		X	X	X	X			



Body Condition Score Record Template

Corresponds with AW1.3

This template may be used for recording body condition scores as required by AW1.3.

Group:

Date:

Median:




1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0






AW2. Living Environment






Desired outcome: Animals are kept in an environment that provides the conditions and facilities needed for health, safety, comfort and normal behavior.

Number	Requirement	Level
AW2.1	Handling and housing systems (including shearing sheds and outdoor pens) shall be designed, constructed and maintained so as to minimize stress and the likelihood of injury to the alpacas during handling.	Mi
	AW2.1.1 Buildings and outdoor pens shall be structurally sound.	Mi
	A building or outdoor pen is considered to be structurally sound if it is capable of adequately and safely confining alpacas without risk of injury (e.g. from collapse of all or part of the structure).	
	AW2.1.2 Infrastructure shall be inspected and maintained regularly.	Mi
	The frequency of inspection and maintenance should at minimum relate to the frequency of use. For example, shearing sheds should be inspected and any maintenance carried out ahead of shearing, but if they are unused at other times of year there is not a need for (say) monthly checks. Similarly, if alpaca are only brought into housing or pens for managed breeding, the housing or pen must be checked and any maintenance carried out ahead of and during the time of use, but ongoing checks at other times may not be necessary.	
AW2.2	Housing shall be well ventilated.	Mi
	This standard applies when alpacas are held in roofed buildings and not when they are in outdoor uncovered pens. Buildings should be effectively ventilated so as to avoid high humidity, condensation, draughts or the build-up of harmful concentration of gases such as ammonia and carbon dioxide.	





Number	Requirement	Level
	<p>Ammonia has a sharp distinctive odor that is detected at low concentrations. At levels above 25ppm both workers and alpaca are at risk of respiratory problems and skin and eye irritation. Ammonia is lighter than air and is easily dispelled by good ventilation.</p> <p>In the absence of ammonia detection devices, sensory evaluation can give initial guidance on whether action to improve ventilation is needed. The odor of ammonia should be barely noticeable on entry to a house or building. If it causes eyes to water or coughing then action must be taken.</p>	
AW2.3	Housing and pens shall be kept in a sanitary condition.	Mi
	<p>This standard applies to outdoor pens as well as buildings. Manure should be removed from housing or shelters on a regular basis.</p> <p>All applicable equipment and services including water bowls and troughs, ventilating fans, heating and lighting units, fire extinguishers and alarm systems should be inspected and cleaned regularly</p>	
AW2.4	Alpacas in housing or outdoor pens shall be protected from either heat or cold stress.	Mi
	<p>Signs of heat stress include:</p> <ul style="list-style-type: none">• Panting• Rapid breathing• Weakness/difficulty standing <p>Remedial action for heat stress includes moving the alpaca to a cool shaded area with good air circulation and offering water. Note that spraying the backline of the alpaca's fleece with water stops air moving through the fleece and may be counterproductive. Wetting the belly of the alpaca may be more effective. Signs of cold stress include:</p> <ul style="list-style-type: none">• Shallow breathing• Shivering• Huddling together with other alpacas <p>Unlike sheep alpacas do not have a high grease content in their fleece and heavy winds and rain can therefore more easily penetrate the fleece which will result in rapid heat loss and cold stress.</p>	






Number	Requirement	Level
	<p>Outside of extreme wet and windy weather young alpacas which tend to have little body fat and alpacas that have just been sheared are most likely to suffer cold stress rather than those animals in the period of feed/water deprivation prior to shearing. Remedial action for cold stress includes moving alpacas to a sheltered area, putting coats or capes on individual alpacas and feeding them.</p>	
	 <p>Heat stress can reduce productivity and cause reproductive problems such as reduced sperm quality in male alpacas. Cold stress can cause mortality, particularly in crias and both heat and cold stress can impact the immune system.</p>	
AW2.5	Flooring in holding pens shall provide good traction.	Mi
	 <p>Smooth concrete can be slippery. If this floor surface is present in holding pens it should be grooved to provide grip and/or covered with bedding or rubber matting.</p> <p>Alpaca should not slip or fall when being moved in holding pens.</p>	
AW2.6	Housed alpacas shall have access to a dry bedding area sufficient to avoid discomfort.	Mi
	AW2.6.1 Alpacas housed or penned on solid concrete floor shall be given sufficient bedding.	Mi
	AW2.6.2 Buildings shall be constructed to provide drainage.	Mi
	 <p>This standard is specific to roofed housing, it does not apply to outdoor pens. In buildings the drainage does not have to be of a particular type, but must ensure that liquid is not building up on the floor areas where alpacas are standing or lying. This could be achieved by having a gentle slope in the flooring so that liquid runs to a drain or collection point, or there could be small gratings in certain areas of the floor that allows liquid to run away.</p>	
	AW2.6.3 Bedding from timber-based products sourced from chemically treated wood is prohibited.	Mi
AW2.7	Housed or penned alpacas shall have pens that provide sufficient freedom of movement and floor space to lie in a normal resting posture.	Mi





Number	Requirement	Level								
	<p>AW2.7.1 Housing and pen space required shall take into account the age, size and class of alpacas and environment.</p>	Mi								
	 <p>The lying area should be of sufficient size to accommodate all alpaca together lying in normal resting posture – see AW2.7.2 below for recommended space per animal.</p> <p>Exception from the above shall apply only in limited circumstances such as examinations, tests, vet treatments, while being fed, marketed, washed, weighed, vaccinated or dipped, while accommodation is being cleaned, or waiting for transportation.</p>									
	<p>AW2.7.2 Each alpaca should have at least the following minimum area per animal after 24 hours or more in housing or pens:</p> <table border="1"> <thead> <tr> <th>Type of animal</th> <th>Minimum area per animal m² (ft²)</th> </tr> </thead> <tbody> <tr> <td>Less than 50kg (110lb)</td> <td>1.2 (13)</td> </tr> <tr> <td>Between 50 and 80 kg (111-176 lb)</td> <td>1.8 (19)</td> </tr> <tr> <td>Between 80 and 120 kg (176 to 264 lb)</td> <td>2.1 (23)</td> </tr> </tbody> </table>	Type of animal	Minimum area per animal m ² (ft ²)	Less than 50kg (110lb)	1.2 (13)	Between 50 and 80 kg (111-176 lb)	1.8 (19)	Between 80 and 120 kg (176 to 264 lb)	2.1 (23)	R
Type of animal	Minimum area per animal m ² (ft ²)									
Less than 50kg (110lb)	1.2 (13)									
Between 50 and 80 kg (111-176 lb)	1.8 (19)									
Between 80 and 120 kg (176 to 264 lb)	2.1 (23)									
AW2.8	<p>Long term close confinement in crates or tethering is prohibited.</p>	Ma								
	<p>AW2.8.1 Tethering or use of crates shall only be used for a minimum time to address a special need such as the provision of medical care. See also section AW3.14 for requirements relating to restraint at shearing.</p>	Ma								
	 <p>Close confinement is when the animal does not have freedom of movement. Examples could include alpaca held in a race or cattle crush. Tethering similarly restricts the alpaca from having freedom of movement. Close confinement and tethering are only acceptable when there is no other option to manage alpaca. If alpaca are held in close confinement or tethered for longer than the time needed to complete the work this becomes “long term” confinement. This will vary with the task at hand. An individual animal restrained to have its feet trimmed could be released in minutes. A mob of alpaca bought in for drenching might be in pens and races for several hours. Both these examples are acceptable.</p>									





Number	Requirement	Level
	<p>Instead of tethering, more humane methods of confining an animal to a specific area such as a secure yard or fenced paddock should be implemented.</p> <p>If animals are tethered, the following should be met:</p> <p>Animals shall be inspected at least twice in each 24-hour period to ensure that food and water are available, they haven't become entangled and the tether is still fitted properly at the head or neck. This shall be increased to three times in very hot weather.</p> <p>For animals that are tethered for longer than a few hours, clean, fresh, potable water should be available at all times in troughs or heavy containers that are firmly fixed on the perimeter of the tether.</p> <p>Tethered grazing animals should receive supplementary feeding where grazing within the extent of the tether is not adequate.</p>	
<p>AW2.9</p>	<p>Housed alpacas shall have access to a lit area for the normal period of daylight hours.</p>	<p>Mi</p>
	<p>AW2.9.1 Alpacas should have access to natural light.</p>	<p>R</p>
	<p>Alpaca should not be kept in permanent darkness nor permanent light. The most important biological functions of all animals are controlled by the circadian rhythm – the physical, mental and behavioral changes that follow a daily cycle. Alpaca are sensitive to changes in the ratio of light and dark in a 24 hour period. In most situations, alpaca will be outdoors where they always have access to natural light, however they may sometimes be enclosed in housing. Ideally housing will allow natural light to enter such that there is sufficient light intensity to allow inspection of alpaca during the daytime and for alpaca to experience natural light cycles. If this is not possible artificial light should be provided to allow for the normal periods of light and dark in every 24-hour period.</p>	
<p>AW2.10</p>	<p>Housed or penned alpacas should not be exposed to sudden or loud noise that could cause fear or stress.</p>	<p>R</p>
	<p>There is limited research specific to alpaca and noise, but it suggests that alpaca have a negative response to sudden loud noises such as people shouting, metal gates being slammed and similar sounds. This should therefore be avoided.</p>	




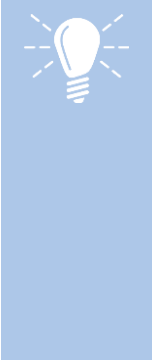



Number	Requirement	Level
AW2.11	Alpacas shall have access to natural pasture at all times unless emergency or severe weather conditions would otherwise negatively impact on their welfare.	C
	<p>Alpaca are best able to perform their normal behaviors when kept as a herd on pasture, and as such this should be the default management position for the lifetime of the animal. However, it is understood that there may be times when alpaca’s welfare is best served by removing them from pasture, for example in extreme weather events such as ice storms or similar, and in those situations removal from pasture is permitted.</p> <p>Keeping alpaca off pasture other than these situations is not permitted. For example, keeping alpacas in pens to raise them for meat is prohibited.</p>	
AW2.12	All alpacas shall have access to effective shade, shelter and/or windbreaks if necessary, to protect them from adverse weather conditions.	Mi
	AW2.12.1 Shelter may be natural or artificial as long as it is available and provides effective protection against prevailing conditions as needed.	Mi
	<p>When planning for extreme weather events and handling, there should be a strategy in place to:</p> <ul style="list-style-type: none">• minimize the risk of hypothermia or heat stress• monitor herd closely for signs of cold or heat stress and take immediate action to provide relief if it occurs• relocate alpaca to a sheltered area or housing in adverse conditions• provide additional feed and / or water in cases of cold or heat stress• provide extra bedding where appropriate• provide supplemental heating for very young animals when temperature becomes low enough to cause cold stress (in farms with housing systems)• manage timing of shearing events to minimize risk of hypothermia (if bad weather is predicted, make alternate arrangements such as delaying shearing or increasing available shelter)	




Number	Requirement	Level
	<ul style="list-style-type: none"> Using coats or capes to provide additional protection for individual alpacas that are most at risk when heavy snowfalls are forecast, move alpaca into safer areas, and prevent them from gathering in places where they may be buried by snow remove alpaca from potential flooding areas at times of risk 	
AW2.13	All fencing shall be appropriate and shall be regularly inspected and maintained.	Mi
	<p>Alpacas are often kept in pasture areas with no fencing but may sometimes be brought into smaller fenced areas or pens. When fencing is used the following points should be taken into account.</p> <p>Electric fences should be designed, installed, used, and maintained so that contact with them does not cause more than momentary discomfort to the alpaca.</p> <p>When any type of mesh fencing is used, it should be inspected frequently to ensure alpaca are not trapped in it.</p> <p>Fences should be of a sufficient height to discourage alpaca from trying to jump over them.</p> <p>If alpacas are ever gathered in small, fenced areas, or handling pens fences should be of a sufficient strength to withstand the side forces applied by alpaca in the yards.</p>	
	<p>Fencing and wildlife:</p> <p>While secure fencing aids in husbandry, care should also be taken to provide passage for wildlife when possible. As noted above alpacas often graze unfenced open land areas and the construction of a single fenced pasture within this area is unlikely to disturb wildlife movements. If however, a network of fencing is developed wildlife must be considered. This may be achieved by leaving gates open and providing access to pastures when alpacas are grazing elsewhere. It also means considering wildlife in fence design. For example, what species, small and/or large, will be unable to cross a farm based on fence typed used? Additional information may be found at www.wildlifefriendly.org/resources</p>	



Number	Requirement	Level
AW2.14	Stocking rates shall be determined based on land type, pasture quality, seasonal conditions, class of stock, available feed and total grazing pressure.	Ma
	Stocking rate records may be as simple as a record of the type (e.g., female alpaca, weaned cria etc.) and number of alpaca that are placed on a set area of land whether this is a single pasture or a groups of several fields that are managed together. Or, stocking rate records can include details of not only number and type of alpaca, but levels of vegetation on entry to and exit from the land, rest times.	
	Alpacas often graze areas that are not defined by fencing or other boundaries. Farmers must still keep a record of the total area available for grazing and the number and type of alpacas using that area. <i>See also LM2.2</i>	
	AW2.14.1 Stocking rates shall be recorded and followed to plan pasture, feeding rations and water resource availability.	Mi
	Grazing pressure includes estimates of use by alpaca and by local wild herbivores.	
	AW2.14.2 The amount of feed on offer should be measured to calculate the number of available grazing days.	R
	Guidance on stocking rates in different regions can be found here. This advice is not specific to alpacas but includes the principles of grazing management: Australia: https://www.mla.com.au/research-and-development/Grazing-pasture-management/improved-pasture/grazing-management/stocking-rate/# Holistic planned grazing: https://www.savory.global/wp-content/uploads/2017/02/about-holistic-planned-grazing.pdf	
AW2.15	Alpacas shall be able to dust bathe.	Mi
	Dust bathing is a form of alpaca grooming behavior. Alpacas will generally create their own dust baths on pasture.	





Number	Requirement	Level
AW2.16	Animals shall be protected from the threat of predators.	Ma
	AW2.16.1 Predator control shall be humane.	Ma
	<i>See Land Management Section 2</i>	
	<p>See also LM2.6 which prohibits the use of poison, leg hold traps and snares.</p> <p>It must be demonstrated that all non-lethal methods have been exhausted before lethal control or live trapping is considered as an option. If used, live traps shall be managed to target the specific problem animal and shall be checked at least twice every 24 hours.</p> <p>Lethal control or live trapping should only be carried out if it is legal in the country of operation. It is the farmer's responsibility to check the relevant legislation in the country of operation to ensure that control measures are legally permitted, and that the species involved is not protected by law. Lethal control is not permitted for protected, threatened or endemic predator species. The IUCN Red List provides details on threatened and endemic species https://www.iucnredlist.org/</p>	




AW3. Animal Management



Desired outcome: Animals are managed in a way that promotes good health and prevents disease. Sick or injured animals are treated. Husbandry operations are carried in a way that minimizes pain and distress.

Number	Requirement	Level
AW3.1	The farm shall conduct routine welfare inspections and monitor for signs of disease or production disorders.	Ma
	AW3.1.1 The frequency of inspections shall be increased as required during, for example, extreme weather events, birthing times etc.	Ma
	Alpaca should be inspected frequently enough to avoid unnecessary suffering. The frequency of inspections should be appropriate to the scale and type of farming system. Most alpaca farmers will monitor their animals daily, but as long as animal health and welfare is maintained and there are no injuries, morbidity and mortality linked to lack of monitoring, less frequent routine monitoring may be acceptable	
	Inspections should include monitoring for signs of disease, infection, lameness, parasites and production disorders. If alpaca are housed, stock keepers should conduct daily inspections to inspect their livestock and equipment.	
	The Inspection Frequency Guidance Note gives more detailed information on the expected inspection routine.	

AW3.2	The farmer shall have a written management plan for herd health and animal welfare.	Ma
	<i>For Communal Farmer Groups, the written management plan for herd health and animal welfare can be prepared at group level.</i>	





	The complexity of a herd health and welfare plan will differ depending on the herd size and circumstances.	
	All Herd Health and Welfare Plans should be:	



Number	Requirement	Level
	<ul style="list-style-type: none"> • Based on each herd’s individual requirements • Developed with appropriate veterinary and technical advice. • Regularly reviewed and updated <p>There is a template for a health and welfare plan for individual farmers and members of farmer groups who each need to prepare their own plan, and a separate template for Communal Farmer Groups who prepare a plan at group level.</p> <p>The use of a RAS template is not compulsory but can be used to provide a basic structure if there is not already a plan in place.</p> <p>The management plan should cover the following areas:</p> <ol style="list-style-type: none"> a. A schedule for herd inspection b. Disease and parasite prevention, management and treatment c. Annual review of herd health, including key challenges and treatments given. d. Animal husbandry procedures e. Biosecurity provisions f. On-farm euthanasia and slaughter plan 	
	<p>Even when the farmer is very experienced in managing alpaca, external advice from a veterinarian or other specialist advisor may assist in providing information and solutions to specific health problems that had not been considered by the farm.</p>	
	<p>See Herd Health and Welfare Plan Template</p> <p>See Communal Farmer Group Health and Welfare Plan Template</p>	



- AW3.3** Alpacas that are found suffering from health problems shall be treated promptly. C
- AW3.3.1** Responsible personnel shall identify and treat sick and/or injured animals and obtain veterinary advice when needed. Ma





Number	Requirement	Level
	AW3.3.2 Alpacas that cannot be treated that cannot move on their own shall only be moved using a humane conveyance method, such as a truck, sled, or cart.	Mi
	AW3.3.3 Animals who will not recover shall be promptly and humanely euthanized.	Ma
	Treatment is “prompt” when it is delivered as soon as possible after the health problem is discovered. For a housed alpaca this could be within an hour, for an alpaca out on pasture that must be caught before treatment, potentially requiring a return to the farm for equipment and the assistance of other workers it could be 4 to 6 hours (or even more) before treatment can be effective.	
	See Euthanasia and On-farm Slaughter Guidance Note	
AW3.4	Any treatments, including herbal as well as veterinary treatments, for the health of the alpacas shall be appropriately administered.	Ma
	Treatments should be timed and administered in accordance with manufacturer’s instructions or professional advice. This includes method of administration, dosage and withholding times.	
	AW3.4.1 Records should be kept detailing: <ul style="list-style-type: none"> a. Substance (product) including herbal remedies administered and reason for treatment b. Animal or group identification c. Number of animals treated d. Date of treatment 	R
	See Treatment and Vaccination Record Template	
AW3.5	Measures shall be taken to prevent or control external and internal parasite infestations such as mange, lice and gastro-intestinal worms.	Ma



Number	Requirement	Level
AW3.5.1	Advice shall be sought as needed from a veterinarian or specialist advisor on prevention, treatment, and strategies to avoid the development of resistant parasites.	Mi
AW3.5.2	When infestations are likely or are found to occur, alpacas shall be treated to control the parasites.	Ma





	<p>For some parasites such as mange, dipping in plunge or immersion baths may be recommended. While this technique is unlikely to be used by small scale farmers who will not have appropriate facilities, when dipping is used the following points should be taken into account: If dipping is to be effective the alpaca must be fully submerged in the solution, but care must be taken to ensure they do not drown. It is not recommended to dip animals under three months of age, and they should be treated topically instead. Alpaca should not be dipped with open cuts or wounds to minimize any risk of infection. Alpaca should not be dipped when they are wet, tired or thirsty. Alpacas should be dipped in the morning to allow the animal to dry before nightfall and avoid complications such as pneumonia. The dip solution must be kept at the required concentration and not allowed to become excessively contaminated with soil or feces as this can lead to post dipping lameness.</p> <p>Worker safety can be maintained by ensuring the correct personal protective equipment is worn, dipping should take place in an area where there is good ventilation and having splash boards and screens to reduce the splash onto workers from alpacas entering the dip. Note that dip residues will remain on alpacas for several weeks following dipping so protective equipment should be used if handling is required during this time.</p>	
	<p>Chemicals used in immersion or plunge baths to control parasites can cause environmental pollution. Immediately after dipping alpacas should be held in draining pens which have impermeable floors that slope back to the dip bath to allow excess dip to be collected before returning alpacas to pasture. The used dip must be disposed of according to local regulations to avoid pollution. This may include diluting it with water and/or adding a chemical treatment to break down the active ingredients of the dip before it is spread on land.</p>	






Number	Requirement	Level
	<p>For further information see Manual Del Alpaquero section 3.3: https://repositorio.inia.gob.pe/bitstream/inia/978/1/Huanca-manual_del_alpaquero.pdf</p>	
	<p>AW3.5.3 Grazing management is utilized to aid in parasite management, allowing for treatments to be administered during the most effective stage of the parasite’s lifecycle.</p>	Mi
	<p>AW3.5.4 Grazing areas and alpacas shall be managed to reduce the risk of facial eczema.</p>	Mi
	<p>Facial eczema is a disease caused when alpacas ingest spores from a type of fungus that is found on pasture in some regions including North America and Australia. The spores release a toxin that causes photosensitivity leading to inflammation and crusting and oozing skin lesions, usually on the face of the animal. Affected animals will seek shade from the sun and often appear restless with a depressed appetite.</p>	
	<p>Spore counts can be carried out to see which pastures are most at risk of causing facial eczema and these areas can then be avoided at peak risk periods when the weather has been warm and wet. Facial eczema can affect all ruminants but alpacas seem to be particularly susceptible and can be affected at spore count levels which are safe for sheep. Pasture management can help reduce the risk of facial eczema. If there is a lot of dead litter at the base of the sward this can increase the risk of build-up of fungal spores so having good grazing management and harrowing the sward can help to reduce this. Animals grazing short pastures at high stocking rates are at greatest risk when the fungus is present. Supplementing with zinc can help reduce liver damage caused by the fungus.</p>	
<p>AW3.6</p>	<p>The decision to carry out injurious husbandry procedures such as castration, shall be based on a welfare risk/benefit analysis rather than as a routine.</p>	Ma
	<p>AW3.6.1 The risk/benefit analysis shall include:</p> <ul style="list-style-type: none"> a) The methods used and steps taken to minimize suffering. b) Regular review of whether the procedures remain necessary, the procedures and pain management protocols used. 	Ma




Number	Requirement	Level
	c) Pain management options shall be discussed with a veterinary surgeon and options shall be reviewed regularly.	
	It is recommended that the risk/benefit analysis is documented but it can be provided verbally. Pain management options have changed markedly over recent years and farmers should regularly investigate whether it is feasible to introduce pain relief administered by the veterinary surgeon or the farmer when injurious husbandry operations are carried out.	
	See Pain Relief Guidance Note	
AW3.7	Animal husbandry procedures shall be performed or supervised by a competent stockperson, using well maintained equipment designed specifically for the purpose. <i>Note: See AW5.11.1 for requirements for contractors to sign the RAS Contractors Declaration.</i>	C
	AW3.7.1 The farm shall have written and/or visual standard operating procedures on how animal husbandry procedures are to be carried out.	Mi
	See Castration Standard Operating Procedure and Pain Relief Guidance Note	
AW3.8	Good hygiene practices shall be followed in relation to facilities, personnel, handling and instruments.	Ma
AW3.9	Castration shall only be carried out on males that are being kept beyond puberty.	Ma
	The farmer needs to demonstrate their intent not to castrate alpaca that do not require it. However, if alpaca are sent to slaughter at different ages it is not always possible to identify at birth males that will be sold prior to puberty and those that will be sold later. As long as justification is provided as part of the requirements of AW3.6 all male alpaca could be castrated	
	AW3.9.1 Pain relief shall be applied when castration is carried out.	Ma

Number	Requirement	Level
	See Pain Relief Guidance Note	
	<p>AW3.9.2 The procedure shall only be performed using surgical methods (i.e. scalpel).</p> <p>AW3.9.3 The procedure shall be carried out by the time the alpaca reaches 12 months of age.</p>	<p>Ma</p> <p>Ma</p>
	<p>A herd of alpaca will give birth over several weeks, so within any group of cria there will be animals of different ages. If castration takes place, normal practice is to gather the herd and castrate all the young males at the same time. In these situations, the average age of castration is acceptable to meet the requirements of this standard. The average castration age of the herd can be calculated by reviewing the spread of birthing dates and the date of castration.</p>	
	<p>For example, a herd where females give birth in a two-month period in February and March and which carries out castration the following February will have cria that are between 11 and 12 months of age on castration day, with an average age of 11 and a half months weeks. This is acceptable.</p> <p>If the same herd carries out castration the following March cria will be between 12 and 13 months of age and the average age will be 12 and a half months – this is not acceptable.</p>	
	<p>AW3.9.4 Farmers shall monitor for signs of post-operative complications and take appropriate corrective actions.</p>	<p>Ma</p>
	<p>Complications can include sepsis – a potential risk if equipment is dirty; hemorrhage – if the testicular artery fails to seal during surgical castration; and clostridial disease such as tetanus.</p>	
<p>AW3.10</p>	<p>Any alpaca marking for identification shall be in accordance with current legislation and best practices.</p> <p><i>Note: Tagging, tattooing, and ear tassels or ribbons are permitted methods of identification.</i></p>	<p>Ma</p>
	<p>AW3.10.1 Hot branding is prohibited.</p>	<p>Ma</p>




Number	Requirement	Level
AW3.10.2	Earmarking (notching) is only permitted under the following conditions: <ul style="list-style-type: none"> a) Where there is a risk of loss of tags from the natural environment or theft; b) Where ear notching does not remove more than 10% of each ear; and c) When ear notching tools or surgically sharp scalpels are used. 	Ma
AW3.11	Action shall be taken promptly to treat lameness and to remove any causes of lameness.	Ma
AW3.11.1	Herds shall be monitored for lame alpacas on a regular basis.	Mi
AW3.11.2	Stock people shall be able to recognize lameness, assess severity and take prompt action to resolve the lameness as quickly as possible.	Mi
	The RAS requires that herds are monitored for lameness on a regular basis and that stock people are able to recognize lameness, assess severity and take prompt action to resolve the lameness.	
	See Lameness Scoring Guidance Note Alpacas have two digits on each foot, each with a toenail. Overgrowth of the toenail, particularly if it is misaligned may require action to trim the nail back so that it is level with the pad and straight.	
AW3.12	Alpacas shall have their teeth checked regularly.	Ma
AW3.12.1	Teeth that are overgrown shall be rasped or trimmed.	Ma
	At the front of the mouth, alpacas only have incisors on the lower jaw. These incisors grind food against the hard dental pad of the upper jaw. The teeth grow continually and if they are not aligned correctly, they won't wear down against the dental pad and can protrude from the mouth. This makes grazing difficult for the alpaca and can cause calluses or bruising to the dental pad. In this situation the alpaca's teeth need to be rasped or trimmed.	



Number	Requirement	Level
	<p>A metal file or rasp (such as those used by equine dentists) can be used for alpacas. However handheld powered tools (for example the Dremel or Tooth-o-matic), which have a grinding attachment may be quicker and easier. Both devices will cause some vibration as they grind the tooth. The Tooth-o-matic is a heavier device than the Dremel. If used correctly both devices can grind the teeth so that they are once again level with the dental pad without leaving sharp edges that could cause cuts in the mouth. Care must be taken not to grind or rasp the tooth so much that the pulp in the center of the tooth is exposed. Wire saws are sometimes used for amending alpaca’s teeth, but this method is not recommended.</p> <p>Tooth trimming is often carried out at the same time as shearing as this is a time when each animal will be handled and examined closely.</p> <p>Male alpacas also develop canine teeth behind their incisors when they are around two to three years of age. These are often known as “fighting teeth” and can be used to inflict injury on other males. These teeth can also be removed or reduced by file or Dremel tool or another tool called a Fight-o-matic that was designed specifically for this purpose. Some farmers use side cutters or pliers to remove fighting teeth but this method risks splitting the tooth and is not recommended.</p>	
AW3.13	<p>Shearing shall be performed by, or under the direct supervision of, a competent shearer.</p> <p><i>Note: See AW5.11.1 for requirements for shearers to sign the RAS Contractors Declaration.</i></p>	C
AW3.13.1	<p>Shearing shall be carried out under the direct supervision of the farmer or a person appointed by the farmer.</p>	Ma
	<p>Direct supervision means that the farmer or person appointed by the farmer is on site while shearing takes place.</p>	
AW3.13.2	<p>Shearing shall be done using techniques and equipment designed to minimize stress and injury.</p>	Ma
AW3.13.3	<p>Particular care shall be taken not to cut or injure the animal, especially the teats/udders of female alpacas and the penis/sheath and scrotum of males.</p>	Ma



Number	Requirement	Level
	AW3.13.4 An action plan shall be instituted to address and prevent any recurring problems with injuries or mishandling.	Ma
	AW3.13.5 Written and/or visual “Shearing Standard Operating Procedures” shall be posted in a visible location of the shearing shed.	Mi
	See Shearing Guidance Note	
AW3.14	Alpacas shall be handled calmly and confidently to minimize stress at shearing. <i>Note: See also section AW4 for general handling standards that must be met in addition to these specific shearing requirements.</i>	Ma
	AW3.14.1 Restraint shall be for the minimum time required to effect shearing.	Ma
	AW3.14.2 If alpacas are restrained with ropes for shearing these shall be tied in a way that does not restrict blood flow.	Ma
	AW3.14.3 Ropes that are soft and do not abrade the skin shall be used if alpacas are restrained with ropes.	Ma
	AW3.14.4 At least two people shall be available to lift and restrain an alpaca for shearing.	Mi
	AW3.14.5 Restrained alpacas shall be under constant supervision.	Mi
	AW3.14.6 Restrained alpacas shall be released from restraint if they are struggling so much that they might injure themselves.	Mi
	AW3.14.7 Alpacas shall be restrained in positions that ensure they cannot inhale regurgitated stomach contents.	Mi
	AW3.14.8 Alpacas shall not be sheared lying directly on concrete or bare earth.	Mi
	AW3.14.9 Alpacas should be placed on a mat if they are sheared when they are lying down	R



Number	Requirement	Level
--------	-------------	-------

	See Shearing Guidance Note	
--	--	--

AW3.15	Pre-shearing planning shall consider climatic conditions and ensure that mitigation measures are in place in the event of changing conditions.	Ma
---------------	--	-----------

Signs of heat stress include:

- Panting
- Rapid breathing
- Weakness/difficulty standing

Remedial action for heat stress includes moving the alpaca to a cool shaded area with good air circulation, and offering water. Note that spraying the fleece along the backline of the alpaca with water stops air moving through the fiber and may be counterproductive. Wetting the belly of the alpaca may be more effective.

Signs of cold stress include:

- Shallow breathing
- Shivering
- Huddling together with other alpacas

Alpaca are more likely to show signs of cold stress after shearing, rather than in the period of feed/water deprivation prior to this operation. Remedial action for cold stress includes moving alpaca to a sheltered area, putting coats or capes on individual alpacas and feeding them.





AW3.16	All shearing related injuries shall be attended to promptly.	Ma
---------------	--	-----------

AW3.16.1	In the event of a severe cut or injury the shearer shall cease shearing immediately to treat the injury.	Ma
-----------------	--	-----------



A severe cut or injury is as follows: open wounds that are greater than 10 cm or at a depth that reaches the muscle layer, the removal of teats in ewes, damage to the prepuce and removal of the tip of the vulva.

Example of treatment could be as follows: sutures, application of a wound repair spray and an antibiotic injection.






Number	Requirement	Level
	AW3.16.2 Pain relief shall be applied for serious injuries when suitable pain relief is available.	Ma
	AW3.16.3 Records of serious injuries shall be kept.	Mi
	See Pain Relief Guidance Note	
	See Injury Record Template	
AW3.17	Breeding strategy shall address welfare traits and suitability for the type of environment in which the alpacas are raised.	Ma
	Breeding stock selection criteria should include, at a minimum: <ul style="list-style-type: none"> a. foot and leg health; b. well-aligned teeth c. overall conformation; d. mothering ability; e. temperament; 	
AW3.18	Artificial breeding procedures shall be carried out by competent operators.	C
	AW3.18.1 Cervical artificial insemination and pregnancy diagnosis shall only be carried out by persons trained and competent with the techniques.	Ma
	AW3.18.2 Routine electroejaculation is prohibited.	Ma
	AW3.18.3 Laparoscopic artificial insemination shall be carried out only by veterinarians or by trained and competent operators under veterinarian supervision. Appropriate pain relief shall be used.	Ma
	Additional points:	



Number	Requirement	Level
	<p>Female alpaca must be well cared for to ensure optimum pregnancy rates. If farmers want to use laparoscopic AI, they need to have good management.</p> <ul style="list-style-type: none"> Female alpaca that are too thin (below BCS 2) or too fat (above BCS 4) have lower conception rates. Stress will reduce conception rates. 	
AW3.19	<p>Birthing shall be supervised, and timely action taken while keeping disturbances to a minimum. Breeds or strains suited to easy births and good maternal care should be used.</p> <p>AW3.19.1 All workers shall be able to recognize the signs of birthing difficulty and know when and how to provide appropriate assistance and when to seek assistance from an experienced producer or veterinarian.</p> <p>AW3.19.2 Embryotomy shall only be performed on dead cria by a skilled person or veterinarian.</p>	<p>Ma</p> <p>Ma</p> <p>Ma</p>
AW3.20	<p>The birthing period shall be planned to coincide with local climatic conditions favorable to good welfare and survival.</p>	<p>Ma</p>
	<p>It is understood that weather conditions can vary from year to year, but the birthing period should be planned to avoid times of year when snow, ice storms, flooding or other extremes of weather that could adversely affect cria survivability are common.</p> <p>Planning the birthing period also requires planning which animals are bred and when. If female alpaca cria are bred when they are too young and small there may be a higher risk of mortality for them and their cria due to multiple factors including producing lower birth weight cria; complications at birthing from females that are not big enough to birth without assistance; and poorer maternal instinct.</p>	
	<p>Weight is a better indicator than age for fitness for breeding. A female alpaca cria that is at least 60 to 65% of her adult weight at first breeding, where nutrition is sufficient to ensure continued growth through pregnancy, is unlikely to experience the negative effects listed above for herself or her cria.</p> <p>The age of puberty in alpaca will vary depending on breed, size (weight), nutrition, and season of birth. Most female alpaca reach puberty between 12 and 24 months of age. Although alpacas can breed year-round – the</p>	





Number	Requirement	Level
	act of mating causes female alpacas to ovulate - most herds birth once per year. It is suggested that most females will be at around 60 to 65% of their adult weight by 14 months of age. Some breeders wait till females are two years old before breeding them for the first time to avoid any possible complications.	
AW3.21	Practices and procedures for cria feeding shall be planned prior to the start of the birthing period.	Mi
	AW3.21.1 Artificially reared cria shall receive a sufficient amount of colostrum after birth to ensure their welfare.	Mi
	Within the first 24 hours of life cria should receive around 10% of their bodyweight in colostrum spread over several feeds.	
	Some cria do not receive sufficient colostrum after birth. Ideally chilled or frozen colostrum from other female alpaca in the herd can be used to supplement artificially reared cria. If this is not available powdered colostrum replacer can be used.	
	AW3.21.2 Cria shall have access to milk in their diet until they are at least 36 weeks old.	Mi
AW3.22	Isolation of individual alpacas shall be minimized.	Ma
	AW3.22.1 In case individual isolation cannot be avoided, the confined alpaca shall be given a companion or be able to maintain visual contact with other alpaca. Exception to contact with neighboring alpacas may be made for quarantine purposes.	Mi
	Alpaca that are sick or injured and unable to keep up with the rest of the herd may need to be isolated in hospital pens. Animals housed in sick pens should be inspected twice daily. Pens housing sick and injured animals should have urine and dung disposed of in a timely manner to prevent spreading infection to other stock. Pens should be constructed to facilitate effective cleaning.	



Number	Requirement	Level
	Continuous access to fresh water, and feed, as needed, should be provided in pens housing sick/injured animals.	
AW3.23	When introducing males to a new group, alpaca shall be monitored for signs of aggression.	Ma
AW3.24	Alpacas shall be euthanized without delay if they are experiencing severe pain or illness and do not have a reasonable expectation of improvement.	C
	AW3.24.1 All workers shall have clear set of criteria to recognize when an animal needs to be euthanized and be instructed to act accordingly.	Ma
	AW3.24.2 The euthanasia shall be done using a method that is quick, causes minimal stress and pain, and results in a rapid loss of consciousness followed by death without the animal regaining consciousness.	Ma
	AW3.24.3 Except in situations of emergency euthanasia, stunning prior to killing is required. Stunning may only be skipped in cases where the animal is in severe pain and finding access to tools for stunning would prolong the suffering. If emergency euthanasia is carried out by cutting the throat best practice guidance shall be followed.	Ma
	See Euthanasia and On-farm Slaughter Guidance Note	
	For Communal Farmer Groups, any written plan for euthanasia can be prepared at group level.	
	See Euthanasia Plan Template .	
AW3.25	When an animal is slaughtered on-farm, it shall be done using a method that is quick, causes minimal stress and pain, and results in a rapid loss of consciousness followed by death without the animal regaining consciousness.	C
	AW3.25.1 Slaughter shall be carried out by either:	Ma
	a) a trained, competent worker	
	b) a licensed slaughterman	



Number	Requirement	Level
	c) a veterinary surgeon	
	Electric stunning using equipment designed for this purpose and operated within manufacturers guidelines is an acceptable method for alpaca slaughter, but rarely found on farm so not included here. See Optional Slaughter Module for further details of this method.	
	AW3.25.2 Acceptable methods of slaughter for alpacas include: a) Firearm b) Penetrating and non-penetrating captive bolt guns. Use of the captive bolt gun shall be immediately followed by a secondary method to ensure death (such as exsanguination or pithing).	Ma
	AW3.25.3 Death shall be confirmed through observation of pupils, heartbeat and lack of respiration prior to disposal or further processing.	Ma
	AW3.25.4 Alpacas shall be slaughtered away from the view of other animals except in unavoidable cases.	Ma
	See Euthanasia and On-farm Slaughter Guidance Note	
AW3.26	The spinal cord shall not be severed or broken in any animal until after confirmation of death.	Ma



AW3. Animal Management: Guidance Notes and Templates



Guidance Notes

- [Inspection Frequency Guidance](#) (corresponding with AW3.1)
- [Pain Relief Guidance](#) (corresponding with AW3.6, AW3.9, AW3.10, AW3.17, AW3.19)
- [Lameness Scoring Guidance](#) (corresponding with AW3.14)
- [Shearing Guidance](#) (corresponding with AW3.14)
- [Euthanasia and On-Farm Slaughter Guidance Note](#) (corresponding with AW3.3, AW3.25, AW3.26)



Standard Operating Procedures

- [Castration Standard Operating Procedure](#) (corresponding with AW3.7, AW3.9)



Templates

- [Herd Health and Welfare Plan template](#) (corresponding with AW3.2) Note that this is the plan for individual farmers and farmer group members who each need to prepare their own plan. There is a separate template for Communal Farmer Groups who prepare a plan at group level in Appendix E.
- [Treatment and vaccination record template](#) (corresponding with AW3.4.1)
- [Injury Record Template](#) (corresponding with AW3.16)
- [Euthanasia Plan Template](#) (corresponding with AW3.24)



Inspection Frequency Guidance

Corresponds to AW3.1

Different production systems

The vast majority of alpacas are raised in South America (primarily Peru) in extensive pasture systems. In other parts of the world there are smaller populations of alpacas that may be managed in more intensive grazing systems. However, although extensive, pasture or rangeland production is a common factor there are many differences in global production systems as follows:

- Farm size
- Herd size
- Climate
- Farm topography
- Stocking rate
- Vegetation type and growth cycle
- Water availability – piped to troughs or natural sources
- Risk factors – e.g. predators.

In most instances, alpacas are monitored daily. With many smaller herds someone is with the alpacas for much of the day. However, there may be situations where some groups of alpacas are not seen daily, and the variants listed above will impact on how often alpacas should be checked to ensure their health and welfare is maintained.

What's the point of inspection?

Before any comment can be made on how often inspection of alpacas is necessary, the desired outcome of inspection must be understood. Farmers check their alpacas to ensure the health and welfare of their animals is maintained. This is achieved by ensuring adequate feed and water are available, alpacas have access to shelter as applicable to the local weather conditions, sick or injured alpacas are identified and treated, and predators and any other threats are monitored, and action taken to deter/control these as necessary.



How frequently should inspection be carried out?

Different systems and stages of alpaca production require different frequencies of inspection to deliver the desired outcomes noted above. Two examples are shown below:

- In a system where alpacas are dependent on human intervention to provide daily feed and water [for example when alpacas are kept in pens in extreme winter weather] they must be checked daily.
- In a system where the stage of production is unchanging [e.g. weaned young alpacas, that are not yet ready to be bred] the stocking rate ensures that adequate grass/forage stocks are available for long-term grazing, there is a natural water source that is known to never dry up; topography ensures shade/shelter is available for expected weather conditions and predators are either unknown or excluded, frequency of checks could be reduced to every few days or even once a week with no ill effects being identified.

Outcomes

As per the current wording farmers need to routinely inspect their animals. Farmers must also assess risk relating to their herds and their farms and increase inspection as necessary. If negative outcomes are found, inspection frequency must be increased. Negative outcomes include:

- **Mortality** – if health or predation problems go unrecognized and unchecked, or females at birthing time are insufficiently monitored, mortality will rise
- **Body condition** – if there is insufficient availability of feed and water BCS will drop



Pain Relief Guidance

Corresponds to AW3.6, AW3.9, AW3.10, AW3.17 and AW3.19.

Why is pain relief needed?

Management tasks such as castration are painful operations. The first question must always be whether such procedures are necessary, and the RAS standards already require that the decision to carry out injurious husbandry procedures, like castration, must be based on a welfare risk/benefit analysis rather than as a routine.

There has been a lot of research into castration of different farm livestock looking at different ages and methods. The results vary in terms of what is considered to be the most painful method or age but there will always be some degree of pain that can be exhibited both during and after castration.

What types of pain-relieving drugs are available?

Local anesthetic

Anesthesia is defined as the loss of sensation with or without the loss of consciousness. A local anesthetic is a drug that, when injected or given topically (on the skin), produces a state of local anesthesia by reversibly blocking the nerve conductors that transmit the feeling of pain from the point of administration to the brain. They are designed not to distribute widely in the body – hence the name “local”. They are easily broken down and excreted by the body. This means that the duration of action is limited. Local anesthetics are the ideal class of drug for reducing acute pain but will not persist long enough to have an effect on long lasting or chronic pain.

Non-steroidal anti-inflammatory drugs (NSAIDs)

NSAIDs are a group of drugs that all have an anti-inflammatory mode of action as well as antipyretic (fever reducing) and analgesic effects.

NSAIDs work by reducing the production of prostaglandins. Prostaglandins are chemicals that promote inflammation, pain and fever. The enzymes that produce prostaglandins are called cyclooxygenases (COX). NSAIDs block COX enzymes and reduce production of prostaglandins. Therefore, inflammation, pain, and fever are reduced.

NSAIDs are slower to act than local anesthetics but have a longer lasting effect – up to 24 hours in some cases.

Alpha-2 adrenergic drugs

Alpha-2 adrenergic drugs include xylazine and detomidine. These drugs provide analgesia, but they also have a sedative effect. These products take a few minutes to take effect (longer if intramuscular rather than intravenous injection is used) and last as a sedative for an hour or



more, but as an analgesic for around 30 minutes. The common Alpha-2 adrenergic drug xylazine is often used by vets in combination with the drug ketamine to give an anesthetic effect.

What does “suitable” mean?

The RAS standards require that for all methods of castration pain relief must be used when suitable pain relief products are available. A suitable product is defined as one that has a pain-relieving effect for the operation that is taking place. Some pain-relieving products act quickly for acute pain, others take longer to show an effect, but last for a greater time period.

What does “available” mean?

Following on from defining whether a product is suitable, the next point is whether it is available. To decide this, a brief background into how veterinary drugs are licensed and used is necessary. Veterinary pharmaceuticals, including pain relieving drugs, have to be licensed for use in individual countries by the companies that produce these. Veterinary pharmaceutical companies generally operate on a global scale, but the fact that they license a particular product in one country does not automatically mean they will seek to license that product elsewhere. The process of licensing drugs for use is time consuming and expensive and companies will not license a product unless they are sure that it will be used.

Licensing will specify the animal species for which the pharmaceuticals are intended; the therapeutic indication (i.e., when the product may be used), the mode of application and the withholding period.

Some licenses require pharmaceuticals to be prescribed by a vet; others allow farmers to purchase the product “over the counter” without prescription.

In the absence of a suitable licensed product, a veterinary surgeon can use their country’s “off-label” or “extra-label” procedure to prescribe a product that is licensed for another species or another therapeutic indication. This is generally only permitted when no other product is already licensed within that country or for that species. Off-label/extra label use means that vets can access pharmaceuticals, including pain relieving drugs, that are not otherwise available. Depending on the licensing rules, such products may only be used by the vet or under the control of the vet.

It is not guaranteed that a farmer will be able to access off-label/extra label products through their vet. It will be up to the individual vet as to whether they are willing and able to facilitate this. There have been instances of attempted suicide by overdose of veterinary pain-relieving drugs in the farming community, plus toxic overdose of local anesthetics such as lidocaine are a risk if dosing rates are miscalculated – as can occur with small cria Vets may therefore be reluctant to allow all farmers access to such drugs.

For the purposes of these standards, it is therefore proposed that “available” should be defined as a product that is licensed for use by the farmer, in the relevant country, for the relevant species, for pain relief. This definition does not require the farm’s vet to make a judgement call



regarding the use of off-label drugs, and the farmer does not have a reason not to get access to the appropriate product. This definition includes drugs where the farmer needs to get a prescription from their vet to obtain the product, as long as the license allows the farmer to use the product without the vet present.

What pain relieving drugs can be used for alpacas?

Research has shown that several pharmaceuticals have pain relieving effects at castration of alpacas. These are listed below. Note that none of these products are currently licensed for use by alpaca farmers – they can only be used off-license by a vet. The list below includes some products that can only be given intravenously. Even if the products became available to a farmer this method of administration should only be carried out by a vet.

Type of product	Active Ingredient	How applied	When applied	When it works	What the product does
NSAID	Meloxicam e.g. metacam	Intra-muscular or sub-cutaneous injection	Prior to the procedure	From 10 minutes after application lasting up to 24 hours	Reduces pain by reducing inflammation
NSAID	Meloxicam e.g. buccalgesic	Gel – inside the cheek	Prior to the procedure	From 10 minutes after application lasting up to 24 hours	Reduces pain by reducing inflammation
Local anesthetic (two formulations)	Bupivacaine & Lignocaine e.g. Trisolfen	To the wound	After the procedure	30 to 60 seconds after application and lasts for 24 hours	Contains local anesthetic to deaden pain, adrenaline to stop bleeding and an antiseptic
Alpha-2 adrenergic	Xylazine	Intra-muscular or intra-venous injection	Prior to the procedure	Several minutes after application, lasting 30 minutes as an	Works as an analgesic or a sedative. Often used in combination



Type of product	Active Ingredient	How applied	When applied	When it works	What the product does
				analgesic (longer as a sedative)	with other products such as meloxicam ketamine or butorphanol
Opiate	Butorphanol tartrate	Intra-venous injection	Prior to the procedure	Around 15 minutes after injection and lasting for 4 hours	Works as an analgesic or a sedative and pre-anesthetic with alpha-2 adrenergic drugs
Dissociative hypnotics	Ketamine	Intra-muscular or intra-venous injection	Prior to the procedure	One minute after intra-venous use, around 10 minutes after intra-muscular use	Works as an analgesic or a sedative and pre-anesthetic with alpha-2 adrenergic drugs

What is reasonable to expect from RAS certified farmers?

As there are currently no licensed products for alpacas in any country, RAS certified farmers are not required to use pain relief. However, if castration or any other painful procedure is carried out by a veterinary surgeon, farmers should ensure that pain relief such as the products and combinations of products from the table above is used.

Pain relief for shearing injuries

Standard AW3.16.2 requires that pain relief is applied to severe shearing injuries when a suitable pain relief product is available. Products such as trisolfen in the table above could provide effective pain relief in this situation, however there are currently no pain-relieving drugs licensed for use in alpacas so this could only be used under veterinary supervision.

Note: The chart of products will be updated on an annual basis.



Lameness Scoring Guidance

Corresponds to AW3.14.

Lameness describes an abnormality of movement and is most evident while the animal is in motion. Although lameness may be as a result of injury, the majority of lameness in alpacas is a result of overgrown toenails. These can be assessed by examining each hoof, but for welfare assessment purposes lameness is assessed by scoring gait. Lameness indicates that the alpaca could be feeling pain and is unable to bear weight completely on the affected limb. This reduces the ability to use one or more limbs in a normal manner, with severe cases reducing mobility or resulting in an inability to bear weight on the limb(s).

How to assess (herd and individual)

Locomotion scoring can be used to assess lameness severity in individual alpaca and severity and prevalence of lameness in herd.

Herd: The flock is observed first in an undisturbed condition to identify animals that cannot bear weight on a foot when standing. They may either hold the foot off the ground or be grazing in a kneeling position. Animals should then be gently encouraged to walk away from the assessor and gait is observed.

Individual: Individual animals should be encouraged to walk along a race, preferably on a hard, flat surface if this available, and gait scored.



How to score

Lameness is scored on four levels:

Score	Description
Not lame (0)	Movement is smooth, weight is borne equally on all four feet with no shortening of stride. Some minor head nodding is acceptable if walking on uneven ground.
Minor lameness (1):	Clear shortening of stride with obvious head nodding or flicking as the affected limb touches the ground.
Lame (2):	Very obvious head nodding and not weight bearing on affected limb while moving, foot may be held up while standing, may be grazing on knees with front leg lameness. Steps are uneven and the stride may be shortened.
Severe lameness (3):	Recumbency or reluctance to stand or move. The affected limb or limbs are clearly identifiable and may be held off the ground while walking or standing.



Shearing Guidance

Shearing guidance note:

Alpacas are larger animals than sheep or goats so there are different challenges to handle and restrain them for shearing. Alpacas also have an inflexible spine so even if it were possible to manhandle them into sitting on their rumps in the position that sheep and goats are sheared it would not be more comfortable or less stressful than the methods currently in use.

Methods of shearing

The methods of shearing alpacas are as follows:

1. Lying down with their front and hind legs restrained
 - a. On the ground
 - b. On a table
2. Haltered and standing

The RAS permits any of the methods above as long as the criteria around the use of halters and restraint are met (see below). When comparing different restraint methods, it has been found that restraining alpacas for shearing by halter when they are standing is less stressful than restraining animals lying down. However, when it comes to carrying out shearing it is only possible to shear a standing, haltered alpaca if the animal is quiet and tame and has been trained to this method. If alpacas will not stand still it creates a risk of injury from the shearing blades either to themselves or one of the handlers or shearers. The research project examining stress at shearing concluded that animals that will not stand quietly to be sheared should be restrained on the ground or on a table. They found no difference in stress levels between shearing an alpaca restrained on the ground or restrained on a table.

Equipment

Alpacas may be sheared with hand shears or electric powered clippers. Hand shears and clipper blades should be kept sharp and electric powered machines maintained in good condition as per manufacturer's instructions.



Preparing for shearing

Alpacas waiting to be sheared should be held in a pen close to the shearing operation. Keeping alpacas in a pen makes it easier to calmly catch each individual for shearing and having the pen close to the shearers minimises the handling that is needed to guide each animal to the shearing point. At all times during the process of catching, restraining, shearing and releasing an alpaca handling must meet the requirements of RAS. All animals must always be handled humanely with no mistreatment.

As shearing typically takes place in the spring, it coincides with many alpacas being heavily pregnant. It is recommended that these animals are sheared first to minimise their time off feed and water. Pregnant animals must be handled with particular care to avoid any risk of stress or injury that could lead to abortion.

Methods of restraint

As noted above, alpacas will be restrained either by using a halter or by using ropes to restrain the front and hind legs. When using a halter care must be taken to ensure that the nosepiece cannot slide down to the soft part of the nose and obstruct the alpaca's breathing.

When restraining the front and hind legs a soft rope should be used to avoid causing abrasion to the skin. It is recommended that the rope should be at least 6mm in diameter and be attached above the fetlock on each limb to prevent any joint injury. Ropes should be tied tightly enough to form an effective restraint but not so tightly that they restrict blood flow to the limbs.

There must be at least two people to restrain an alpaca for shearing. If the alpaca is to be sheared lying down it must be lifted carefully, laid in the correct position on the floor or on a table and then restrained. While the alpaca is restrained it must be under constant supervision by the handler assisting the shearer and if the alpaca becomes distressed and is struggling to the point that it could cause injury to itself it should be released. It is understood that it is important for alpaca welfare that the fleece is removed each year. Any animal that has to be released before shearing is complete should be returned to its companions and given time to settle before a further attempt to complete shearing is made. The animal may be less stressed if it can be sheared last, when there is less other activity around the shearing shed and when extra personnel may be available to assist the shearer.

Shearing surface

As noted above, alpacas may be sheared on a table or on the ground. It is recommended that a mat is used to improve alpaca comfort when they are sheared lying down. It is not permitted for alpacas to be sheared when they are lying directly on concrete or bare earth.

Using tables can help reduce strain for the shearer, but the alpaca must be lifted on and off the table with care and restrained so that it cannot accidentally fall.



Shearing time

As the alpaca will be restrained in one form or another for shearing it is important that this restraint is for as short a time period as possible. Experienced shearers can shear an alpaca within four or five minutes and while completing the job carefully and without injury to the alpaca takes precedent over speed, no animal should be restrained for more than ten minutes.



Euthanasia and On-farm Slaughter Guidance

Corresponds to AW3.3.3, AW3.24 and AW3.25.

What's the difference between euthanasia and on-farm slaughter?

Euthanasia

- Slaughter of an alpaca as a result of irrecoverable injury or illness
- Euthanasia is not planned – a farm will not know how many, or which alpacas might need to be euthanized in a particular month or year.

On-farm slaughter

- Planned slaughter of alpacas for home/worker consumption, food for farm dogs etc.
- A farm will have an idea of the number of alpacas they intend to slaughter each month or year for the reasons listed above and will select the animals for slaughter.

RAS requires that both euthanasia and on-farm slaughter are carried out using a method that is quick, causes minimal stress and pain, and results in a rapid loss of consciousness followed by death without the animal regaining consciousness.

Equipment

Equipment that can be used for euthanasia and on-farm slaughter of alpacas is shown below:

- Penetrating and non-penetrating captive bolt guns
- Firearm
- Veterinary administered barbiturate overdose (euthanasia only)

Availability of equipment

The availability of firearms for on-farm use is dependent on local licensing laws.

Captive bolt guns generally do not come under firearms licensing laws as they are considered safer than firearms so are easier for farmers to access and use. Captive bolt guns are most often powered by cartridges (ammunition), but some designs use gas or compressed air.



Company	Equipment suitable for alpacas	Details	Countries where available
Accles and Shelvoke accles-shelvoke.com/distributors	Cash Special	Cartridge powered penetrating captive bolt gun. Designed for both abattoir and on-farm use	Europe, South Africa, Kenya, Australia, New Zealand, Argentina, Brazil, Chile, United States, Canada.
Blitz Kerner	Turbocut captive bolt gun [also sold as the "Shoof" in NZ]	Cartridge powered penetrating captive bolt gun. Designed for abattoir and on-farm use	Europe, Australia, New Zealand, United States, Canada.
Bock Industries bock-industries.com	Ted Stunner	Propane powered captive bolt gun Designed for euthanasia/casualty slaughter on farm	United States, Canada.
Jarvis	Variety of products	Cartridge powered penetrating and non-penetrating captive bolts. Designed primarily for abattoir use	Europe, South Africa, Australia, Argentina, Brazil, China, New Zealand, United States, Canada
Schermer karl-schermer.de	K-Line	Cartridge powered penetrating captive bolt gun. Designed primarily for abattoir use	Europe, Australia, United States, Canada.
Termet termet-solefi.com/international-retailers2.html	Matasson	Cartridge powered non-penetrating captive bolt gun. Designed for both abattoir and on-farm use	Europe, South Africa, Australia, New Zealand, Argentina, Chile, Venezuela, United States, Canada.

Correct positioning of equipment

If captive bolt or firearm euthanasia is carried out the equipment needs to be positioned correctly – see diagram below. The device should be placed at the crown position – the highest point on the head – aiming downwards to the base of the jaw.

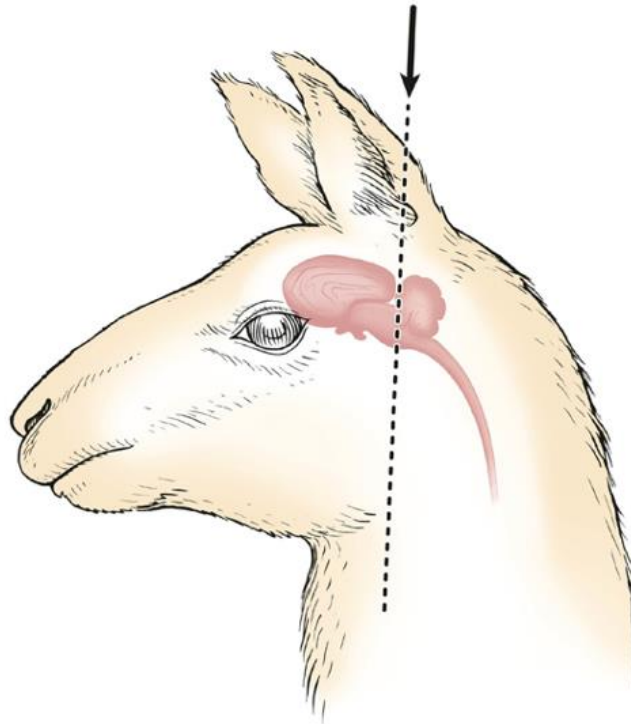


Diagram for correct placement of captive bolt to euthanize an alpaca from the AVMA Guidelines for the Euthanasia of Animals 2020 Edition. The full document can be found here:

https://www.avma.org/sites/default/files/2020-01/2020_Euthanasia_Final_1-15-20.pdf



Knife euthanasia

AW3.24.3 requires alpacas to be stunned prior to euthanasia. Stunning may only be skipped in cases where the animal is in severe pain and finding access to tools for stunning would prolong the suffering. Using a knife for alpaca euthanasia is commonly used without prior stunning. Circumstances under which this would be permitted include:

- Where licensing restrictions limit the access to the appropriate equipment;
- Where the appropriate equipment is not available for purchase;
- Equipment may be available within the country or region but not yet on-farm and it can be demonstrated that the farm is working towards having suitable equipment and trained staff to use it.

The last point may be of most relevant to those seeking group certification where there may be multiple farms of varying sizes which need to change their current method of euthanasia.

As with all methods of euthanasia, a SOP for the process must be prepared and evidence presented of training of all relevant staff in the correct method. An example is provided in Figure 1. It must be noted that inserting a knife in the back of the alpaca's neck to sever the spinal cord prior to cutting the animal's throat is not permitted.

Knife slaughter

As noted above, on-farm slaughter and euthanasia have different definitions, and while euthanasia can be in response to an emergency situation, on-farm slaughter is a planned activity. Therefore, if on-farm slaughter is to be carried out without using a method listed in AW3.24.2 an exemption must first be granted.

RAF Exemption Policy

It is possible that a situation will arise in which a farmer meets the goals of the standard, but does not conform to a specific requirement of the standard. In this situation, the Certification Body may request to grant an exemption which means the certificate is issued without the requirement being met. Exemptions are granted on a case-by-case basis, and only for a limited period of time per farm.

In these cases, the Certification Body shall submit the audit report to Textile Exchange, along with the description of the exemption, the reason for the exemption, and the amount of time allowed for the exemption. Textile Exchange will make the final decision of whether or not the exemption is allowed.



Exemption for on-farm slaughter using a knife

Circumstances in which an exemption may be granted and non-emergency on-farm slaughter using a knife would be permitted are the same as those for knife euthanasia and include:

- Where licensing restrictions limit the access to the appropriate equipment.
- Where the appropriate equipment is not available for purchase.
- Equipment may be available within the country or region but not yet on-farm and it can be demonstrated that the farm is working towards having suitable equipment and trained staff to use it.

Where an exemption is granted, a SOP for the process must be prepared and evidence presented of training of all relevant staff in the correct method. An example is provided in Figure 1. It must be noted that inserting a knife in the back of the alpaca's neck to sever the spinal cord prior to cutting the animal's throat is not permitted.

Figure 1. (Adapted from: *Humane Slaughter Good practice guidelines for the on-farm slaughter of sheep*, The New Zealand Merino Company Ltd, Beef + Lamb New Zealand)

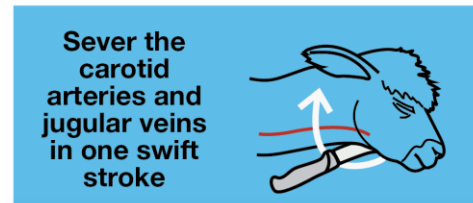
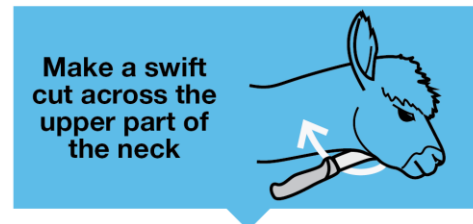
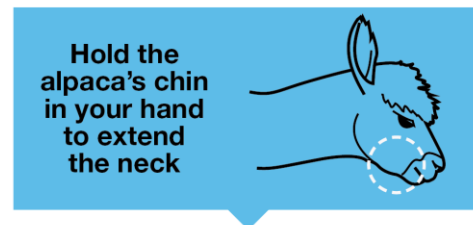
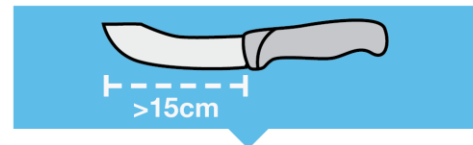
Throat Cut (without prior stunning)

Only in emergency circumstances should throat cutting be employed as a method.

Cutting an alpaca's throat without prior stunning should only be used if there are no alternatives available, and in order to prevent a longer period of pain or suffering for the animal involved. It should never be done in the planned killing of alpacas for personal consumption or other reasons unless an exemption has been granted (see above).

Throat Cut Procedure

1. If having to cut an alpaca's throat in an emergency situation then never break the neck as this only causes additional trauma before the animal has lost consciousness
2. The knife used should be very sharp and have a blade at least 15cm long
3. Ensure the alpaca is adequately restrained standing or lying with its chin in your hand to extend the neck
4. Make a swift firm cut across the upper part of the neck, severing both the carotid arteries and jugular veins. The trachea (windpipe) and esophagus will also be severed. Check that the incision does not close over the knife during the throat cut
5. It will take approximately 8 seconds for the alpaca to lose consciousness and it should be restrained until then
6. Monitor until death is confirmed



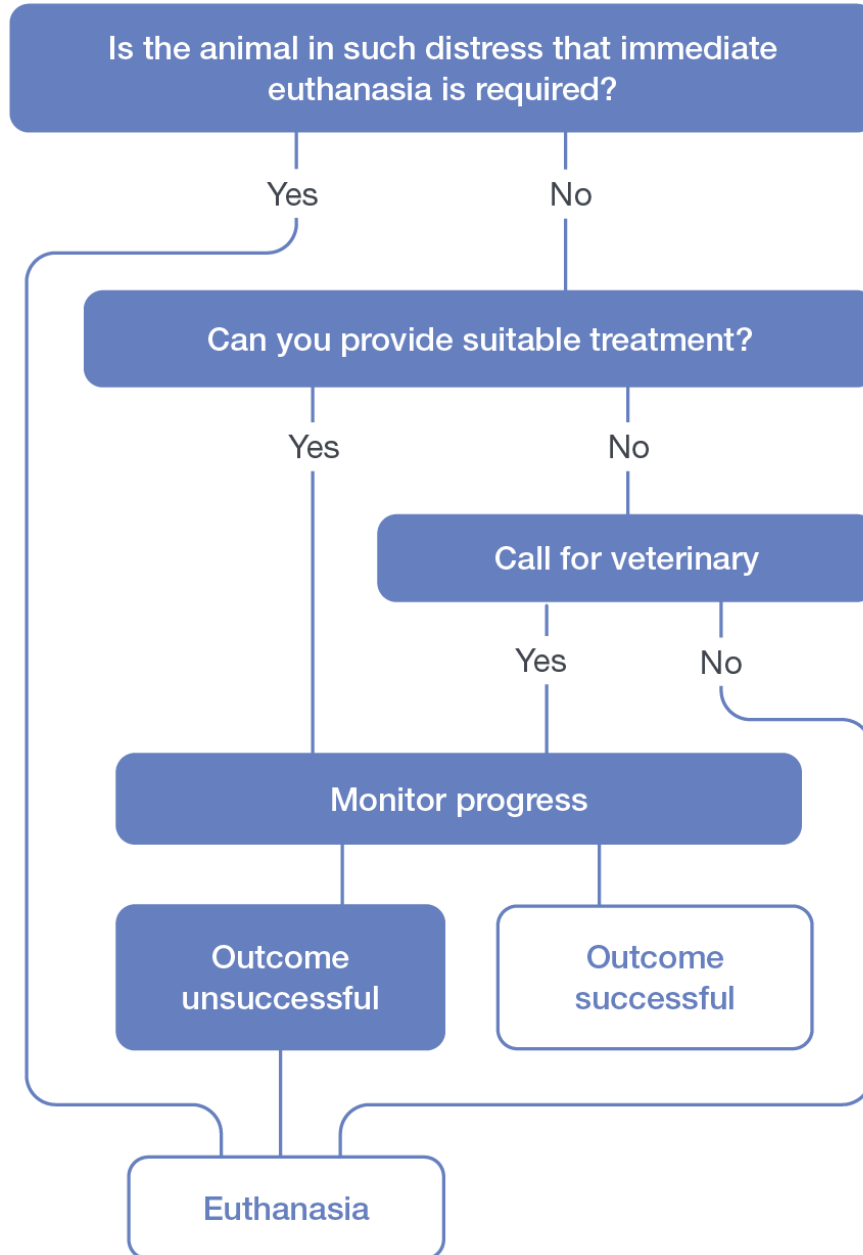
Check the kill has been effective:

- No blink reflex when surface of the eye is touched
- Pupils dilated and fixed
- No heartbeat
- No regular breathing



When is euthanasia necessary – the Euthanasia Decision Tree:

This diagram is based on the 'Casualty Sheep', Sheep Veterinary Society., but is relevant for all species.





The following information is taken from the Sheep Euthanasia Manual (2017) published by Alberta Lamb Producers and written by Jennifer Woods MSc. of J. Woods Livestock Services. Please note their disclaimer below the information provided. Although this information is aimed at sheep farmers the principles are the same across all species.

The full document can be found here:

<https://www.ablamb.ca/images/documents/resources/Sheep-Euthanasia-Manual-final.pdf>

When is euthanasia appropriate?

Just because there is a chance for recovery, it does not mean treatment is always the optimal choice for the producer or the animal. When deciding which option is best, there are several questions a handler has to ask in order to make a responsible decision.

- Is the animal experiencing a high level of pain?
- Will it require continual medication to alleviate the pain and suffering.
- Will the animal have to endure a painful and lengthy recovery?
- Will the animal be likely to return to normal function post recovery?
- Can the required care be provided during the convalescent period?
- Is the animal likely to suffer chronic pain or immobility following recovery?
- Will weather extremes create inhumane conditions for this animal during and/or after recovery?
- Will the animal be unable to or have difficulty accessing feed and water?
- Will the cost of therapy outweigh financial return?
- Is the animal contagious and can spread disease or illness to other animals, adversely affecting the welfare and the economics of the facility?

One of the biggest challenges though is determining: *How long should an animal be given to recover?* Current industry literature and guidelines would suggest that animals should show evidence of significant improvement within 24 hours from the onset of treatment.

Simply leaving an animal that is suffering to die of natural causes or in other words, “letting nature take its course” is unacceptable. Furthermore, it is NOT acceptable to prolong an animal’s misery by delaying euthanasia for reasons of convenience. It is important that when euthanasia is indicated, it be conducted in timely manner.



The following is a list of the more common situation that producers encounter while raising animals. This reference list is not intended to be all inclusive. It provides common examples of poor health and disease that may require euthanasia.

- Too weak to transport due to emaciation and poor body condition.
- Unresponsive to treatment and lack of ongoing desire to eat.
- Disease for which no effective treatment is known or is cost prohibitive.
- Disease for which expected recovery is unusually prolonged.
- Drastic weight loss.
- Contagious or reportable disease.
- Unresponsive respiratory disease/illness.
- Advanced or infectious arthritis affecting more than two joints.
- Intractable diarrhea.
- Paralysis from traumatic injuries or disease that results in immobility.
- Transmittable diseases (Zoonotics).
- Fractures of the legs, hip or spine.
- Emergency medical conditions that result in excruciating pain that cannot be relieved by treatment (i.e. trauma associated with highway accidents).
- A wound significantly impacting a critical biological function (i.e. major organ, muscle and skeletal systems, brain injury).
- Profuse bleeding.

Alberta Lamb disclaimer: This document is provided by Alberta Lamb Producers and Jennifer Woods and may be used for informational and resource purposes only. The information is being published in good faith, with the understanding that the most current information available has been used and that reasonable efforts have been made to ensure that the contents are accurate and reliable. Alberta Lamb Producers and Jennifer Woods do not, however, warrant the quality, timeliness, adequacy, accuracy, suitability or completeness of the contents of this document. Neither Alberta Lamb Producers nor Jennifer Woods shall be liable or responsible for any claim or damage, direct or indirect, arising out of the interpretation, reliance upon or other use of this information. The views and opinions expressed in this report are not necessarily those of Agriculture and Agri- Food Canada or Alberta Agriculture and Forestry. The Government of Canada, Alberta Agriculture and Forestry, or the Alberta Lamb Producers will not be liable for any claims, damages, or losses of any kind whatsoever arising out of the use of, or reliance upon, this information.



Castration Standard Operating Procedure

Corresponds with AW3.7 and AW3.9.

Justification

Castration should only be done where the procedure results in benefits to life time alpaca welfare, better herd management and a reduced health and safety risk to handlers.

Alpacas destined for slaughter before the onset of puberty, should not be castrated.

Details of procedure

Alpacas need to be restrained for castration so there must be at least two people to carry out this operation. Alpacas may be castrated either standing up or recumbent, but it should be noted that sedated alpacas may try to lie down so planning for recumbency may be the best option.

Only the following method may be used:

- Surgical (i.e., scalpel)

Surgical

This method involves cutting open the scrotum and complete removal of the testes. An incision is made in the scrotum over each testis. Gentle pressure is then applied either side of each testicle to extrude it through the incision. The spermatic cord to each testicle should then be clamped with a ligature before being cut so that each testicle can be removed. The incisions are left open so the wound can drain. However, this is an open wound and infection, abscesses and/or clostridial diseases such as tetanus are a potential risk.

Pain relief measures

Pain management options shall be discussed with a veterinary surgeon and options shall be reviewed regularly. See the additional pain relief guidance sheet.

Age

Castration shall be carried out by the time alpacas reach 12 months of age. The age of castration of alpacas is higher than for sheep or goats as the anatomy and development of alpacas is different to those species.



A herd of alpaca will give birth over several weeks, so within any group of cria there will be animals of different ages. If castration takes place, normal practice is to gather the herd and castrate all the young males at the same time. In these situations, the average age of castration is acceptable to meet the requirements of this standard. The average castration age of the herd can be calculated by reviewing the spread of birthing dates and the date of castration.

For example, a herd where females give birth in a two-month period in February and March and which carries out castration the following February will have cria that are between 11 and 12 months of age on castration day, with an average age of 11 and a half months weeks. This is acceptable.

If the same herd carries out castration the following March cria will be between 12 and 13 months of age and the average age will be 12 and a half months – this is not acceptable.

Care of animal(s) during/after the procedure

Alpacas should be handled quietly before, during and after the procedure.

Following the procedure, alpacas will be turned back onto dry, clean pasture or a dry, clean pen.

Alpacas must be inspected regularly following the procedure and with minimal disturbance for signs of post-operative complications during the healing process, and appropriate action taken as indicated.

Complications can include sepsis – a potential risk if equipment is dirty; hemorrhage – if the testicular artery fails to seal during surgical castration; and clostridial disease such as tetanus.

Precautions

Good hygiene should be practiced in relation to facilities, hands, handling and instruments with disinfectant being used and changed frequently.

Consideration of weather and yard conditions and fly activity should be made when planning castration (e.g. avoid muddy yards and wet or humid weather).

Qualifications, experience or training necessary to perform this technique

The procedure shall be performed or supervised by a competent stockperson or veterinary surgeon, using well-maintained equipment designed specifically for the purpose.



Herd Health and Welfare Plan Template



Corresponds with AW3.2 Note that this is the plan for individual farmers and farmer group members who each need to prepare their own plan. There is a separate template for Communal Farmer Groups who prepare a plan at group level in Appendix E.

Herd Health and Welfare Plan

For individual farmers and farmer group members.

Farm Name:

Location:

Date:

Completion of this template meets the requirements of AW3.2



Introduction

The complexity of a herd health and welfare plan will differ depending on the herd size and circumstances.

All Flock Health and Welfare Plans shall be:

- Based on each herd’s individual requirements
- Developed with appropriate veterinary and technical advice.
- Regularly reviewed and updated

The use of this template is not compulsory but can be used to provide a basic structure if there is not already a plan in place.

Date of Plan		
Farmer Name		
Farm Name		
Size of farm [acres/ha]		
Veterinary Practice Details		
Plan completed by:	Name: Position	Signature: Date:



1. Herd details

1.1 Herd details

Type of alpacas kept i.e. suri huacaya or both	
Number of breeding females	
Number of breeding males	
Expected annual birthing %	

1.2 Describe your herd inspection schedule: who inspects the alpacas, and how often.

	Months when this is applicable to alpacas	Frequency of inspection	Person responsible
Off pasture, in pens or housing			
Pastured			



2. Disease Prevention, Management and Treatment

2.1 Planned disease prevention, parasite management and vaccination program.

Provide details of your program below.

When	Type of animal e.g. breeding females, unweaned or weaned crias, breeding males	Issue e.g. internal parasites / external parasites / clostridial disease	Action e.g. vaccinate with [product]/drench with [product]
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

3. Animal Husbandry Procedures



3.1 Castration

If castration is carried out, describe the approach including details of rationale, method, age and pain relief. If pain relief is not provided provide a rationale for this.

If castration is not carried out check this box and move to the next section

Reason for castrating male alpacas	
Method(s) used	
Age(s)	
Pain relief measures	
Reason if pain relief is not used	



4. Breeding Management and Birthing

4.1 Breeding management

What are the qualities that you are selecting for in your breeding strategy?

Example: conformation, fiber type/quality, birth rates, meat quality etc.

e.g. we exclude any animals with misaligned/undershot jaw or other conformation problems from our breeding program. We have recently purchased new breeding male with very good fiber quality to improve this factor in our herd.

4.2 Breeding procedures

a.) Do you use laparoscopic artificial insemination? If yes, please indicate why this is used, who carries out the procedure, and provide details of pain relief.

e.g. the best females in our herd may be bred using laparoscopic AI to introduce superior fiber traits. The vet carries out the procedure. Alpacas are sedated with ACP and given ketoprofen as an analgesic. Antiseptic spray is applied following the procedure and ewes are monitored carefully.

b.) Do you use electroejaculation? If yes, please indicate why this is carried out, who carries out the procedure, and provide details of pain relief.



e.g. we have a stud breeding operation and the vet carries out electroejaculation for fertility testing for all stud males.

4.3 Birthing

Detail the plans for birthing including time of year and other factor to reduce mortality of mothers and offspring

e.g. birthing is planned for the spring, when the weather is warmer and there is good grass growth to support the lactating females. Our female alpacas are not bred until they are at least two years old.



5. Biosecurity Measures

Biosecurity

Document the actions undertaken to manage or reduce the risk of disease from the following sources, and any others you have identified.

Potential sources of disease	Control Actions Taken
Incoming livestock	<i>e.g. Only purchase from herds with known health status. Put incoming stock in quarantine pen with no contact with existing herd for 28 days. Monitor for signs of disease</i>
People	<i>e.g. no visitors to the farm without prior appointment and record kept of visitors.</i>
Buildings (if present on farm)	<i>e.g. disinfectant foot dips outside each building</i>
Equipment	<i>e.g. Shearers ensure sanitized clippers brought onto farm</i>
Other (please describe)	<i>e.g. Herd and move alpacas so they do not mix with neighboring flocks.</i>



6. Health Issue Review and Action Plan

The table below can be used to summarize the issues that have occurred through the year, treatments given, and any deaths/culls that may be attributable to a specific health problem. Carrying out this review will help identify whether certain health issues are increasing or decreasing from year to year.

Condition	Animals Treated	Mortalities			Comments
		Died	Euthanized	Culled	
Lameness					
Metabolic disease					
Clostridial disease					
Viral disease					
Bacterial disease					
Facial eczema					
Plant poisoning					
Parasites	Mange				
	Flystrike				
	Fluke				
	Worms				
	Lice				
Br	Abortion				



Condition	Animals Treated	Mortalities			Comments
		Died	Euthanized	Culled	
Difficulty birthing					
Barren					
Mastitis					
Other					
Cria	Congenital defect				
	Starvation/ Exposure				
	Pneumonia/ Respiratory disease				
	Joint ill				
	Other				
Predators					
Other					
Unknown					



Action Plan

Review records and collated data and identify key issues to address and actions to take.

Issue	Brief description	Actions already taken	Actions to be taken
1			
2			
3			
4			
5			

Comment:



Treatment and Vaccination Record Template

Corresponds with AW3.4.1.

Date withdrawal finishes														
Withdrawal time (days)														
Date of treatment														
Reason for treatment														
Vaccine / treatment used														
Number of animals treated														
Type of animal(s) (breeding male/female, cria pre/post weaning)														
Animal / group ID														



Injury Record Template

Corresponds with AW3.17 and TG10.3

Animal ID	Reason for injury	Treatment	Date of treatment
	<i>e.g. shearing injury, transport injury, injury in pens etc.</i>		



Responsible Alpaca Standard 1.0
© 2021 Textile Exchange



Euthanasia Plan Template

Corresponds to AW3.24

Euthanasia Plan

For individual farmers, farmer group members
and Communal Farmer Groups.

Farm or Group Name:

Location:

Date:

Completion of this template meets the requirements of AW3.24

The following template is adapted from the Sheep Euthanasia Manual (2017) published by Alberta Lamb Producers and written by Jennifer Woods MSc. of J. Woods Livestock Services. Please note their disclaimer below the information provided in the Euthanasia and On-farm



Euthanasia Guidance. Although this guidance was developed for sheep farmers, the principles are the same for all species.

The full document can be found here:

<https://www.ablamb.ca/images/documents/resources/Sheep-Euthanasia-Manual-final.pdf>

1. Farm or Communal Farmer Group details

Date of Plan		
Farmer Name		
Farm or Group Name		
Farm or Group Address		
Plan completed by:	Name: Position:	Signature: Date:
Date plan due for review		



2. Farmers or farm workers trained in euthanasia

Name	Date of training

3. Animals that will be promptly euthanized include:

Condition	Check to show that alpaca with this condition will be euthanized
Untreatable conditions	
Non-responsive to treatment and not likely to recover	
Unfit for slaughter	
Weak, unable to stand or walk	
Unable to eat or drink	
Farm is unable to provide appropriate care	
Showing signs of a reportable disease	
Animal is showing signs of suffering, in pain or distress	



4. Acceptable methods

Size/type of alpaca	Acceptable method of euthanasia
Cria pre-weaning	
Cria post-weaning	
Breeding female	
Breeding male	

5. Acceptable secondary methods (if necessary)

Size/type of alpaca	Secondary method of euthanasia
Cria pre-weaning	
Cria post-weaning	
Breeding female	
Breeding male	

6. Death and disposal

<p>What checks to confirm death are carried out before any euthanized animals is moved or disposed of?</p>



How are euthanized animals disposed of?

7. Reportable disease

If there is a suspicion of reportable disease, please detail who should be contacted

8. Other contacts



Veterinarian	
Deadstock removal service (if applicable)	
Other (please specify)	



AW4. Handling and Transport



Desired outcome: Good human-animal relationships are in place and animals are handled and transported around the farm and off the farm in a way that protects welfare.

Number	Requirement	Level
AW4.1	Animals shall be handled humanely; mistreatment of animals is unacceptable.	C
	This standard is not only about the elimination of any mistreatment of animals, but it also requires that humane handling is used. Humane handling takes account of animal behavior to encourage alpacas to move rather than forcing them to do so.	
	<p>If alpacas are handled calmly and quietly management tasks are easier to do and are less stressful for alpacas and farm workers. Humane handling also builds a positive relationship between handler and animal so that when close contact is needed it does not cause distress to the alpaca.</p> <p>People handling alpacas should be aware of signs that the animals are becoming stressed, for example whether they are humming or spitting, and should take action to counter this for example moving more slowly, reducing any noise, moving animals to smaller pens if they need to be caught, to avoid chasing them or simply pausing the task to allow alpacas to settle before continuing.</p>	
	<p>AW4.1.1 Mistreatment includes rough physical contact such as kicking, striking, slamming gates on the alpacas, tripping, throwing or dropping animals, dragging or pulling alpacas by the fleece, tail, ears, head or neck, or dragging by the back legs.</p>	C
	<p>AW4.1.2 Extra care shall be taken when handling alpacas with special needs, such as young crias, heavily pregnant females, lame alpacas and breeding males. Heavily pregnant females shall only be handled when absolutely necessary.</p>	Ma



AW4.1.3 Electric prodders shall not be used.

Ma



Electric prodders include any device that delivers an electric shock when handling animals. They are also known as electric prods and hotshots.

AW4.1.4 Halters shall be fitted so as not to obstruct breathing.

Mi

AW4.1.5 Chukkering is prohibited.

Mi



Chukkering involves tying a loop of rope around the abdomen of the animal, in front of the hind legs, just tightly enough to flex, and placing each hindleg in turn through the loop so the fetlock joint is on the rope. The animal is then restrained in a sitting position.

AW4.2 Audible or visual aids to handling (e.g. rattles or flags) should be used in preference to physical contact.

R

AW4.3 Alpacas moved on foot shall not be forced to proceed at a pace that will cause exhaustion, heat stress or injury.

Ma

AW4.3.1 Alpacas shall be driven in a calm manner at a relaxed pace, natural to that animal, and not faster than the pace of the slowest animal.

Ma

AW4.3.2 Sick, injured, disabled, severely lame, or heavily pregnant animals shall be moved only when necessary and at a pace to suit their condition.

Ma

AW4.3.3 Contingency plans shall be made to move alpacas that become lame or weak by vehicle.

Mi

AW4.4 Livestock guardian animals shall be suitable for the farm environment and the expected predator threat.

Ma



A number of animals have been successfully used as Livestock Guardians. The most common are livestock guardian dogs, but donkeys and llamas have also been used. The success of guardian animals will depend on the type and numbers of predators, the size of the herd and the number of trained guardians bonded to that herd. For example, llamas have been shown to chase smaller predators away from the herd, but if the main threat is puma or other large predators, guardian dogs will



be more appropriate. With a large herd and/or multiple potential predator attacks multiple guardian animals will be needed.

AW4.5 In situations where the farm is responsible for or in control of the transport of alpacas, the requirements of the RAS Transport Guidance (TG1 to TG10) and regional legal requirements shall be met. Ma



See [Transport Guidance](#)

AW4.6 The farmer shall keep records of injury and death rates associated with all transport of their alpacas and take actions to address high rates. Mi

AW4.7 Farmers shall not knowingly sell their alpacas to traders or brokers who intend to export their livestock for slaughter internationally. C



Live export is the sale or transfer of alpaca from one country to another. The only exception to this standard is when live export is across a single border to a neighboring country, alpaca are only transported on land and transport can be accomplished within all requirements of the Transport Guidance.

Knowingly selling alpaca for live export means that the farmer is selling directly to a trader or broker who only deals in live export and/or when the buyer has advertised or otherwise communicated to the farmer that alpaca sold to them will be sent for live export.

If a farmer sells through an auction barn or market where there are multiple buyers, and the farmer has no control over who purchases the stock they are not knowingly selling for live export.



Live export has many welfare risks for animals and is coming under increasing regulatory and public scrutiny. Live export often entails transport that takes several days in conditions that are inadequate to maintain animal welfare. Animals may be slaughtered at the end of their journey in ways that do not meet the regulatory requirements of the source country, nor RAS's slaughter requirements.



AW4. Handling and Transport: Guidance Notes and Templates



Guidance Notes

- [Transport Guidance](#)



Transport Guidance


Corresponds to AW4.5.

Number	Requirement	Level
TG1. Responsibilities, Competency, and Stockmanship		
TG1.1	At every stage of transport, animals shall be cared for by a sufficient number of personnel, who collectively possess the appropriate ability, knowledge and competence necessary to maintain the health and welfare of the animals.	C
TG1.2	The person in charge of an animal may change as it moves from the farm to its final destination. The responsibility for implementing the standard shall therefore lie with the person(s) selecting and presenting animals for transport, and also the person(s) or organization(s) accepting the animals for transport.	Ma
	TG1.2.1 Where the responsibility changes, the person(s) or organization(s) accepting the animals for transport shall provide a copy of their Standard Operating Procedures.	Mi
TG2. Documentation		
TG2.1	All required documentation shall be completed and accessible to the relevant personnel prior to embarking on and during travel, so that incomplete or inaccessible documentation does not cause any delay in animals reaching the destination or being unloaded at the destination.	Mi
TG2.2	There shall be a contingency plan in place that allows the needs of animals to be met in the event of any delays arising during the journey.	Mi
TG3. Fitness for Travel		
TG3.1	All alpacas shall be assessed as fit for transport. The following animals shall not be transported unless it is for the purposes of veterinary treatment: <ul style="list-style-type: none"> a. sick, injured, weak, or disabled animals 	C



Number	Requirement	Level
	<ul style="list-style-type: none">b. those that are unable to stand unaided and bear weight on each legc. those that are blind in both eyesd. those that cannot be moved without causing them additional sufferinge. those whose body condition would result in poor welfare because of the expected climatic conditions.	
TG3.1.1	If animals meeting these conditions are suffering and unlikely to recover, they should be euthanized on the farm. They should not be transported to auction or slaughter.	R
TG3.2	The following animals shall only be transported if the journey is short (less than 50km) and the purpose is to improve conditions for the animal and the journey will not cause unnecessary pain or suffering. Otherwise, transport shall be delayed until they are fit to travel. <ul style="list-style-type: none">a. Heavily pregnant females (past 90% gestation)b. Newborn cria where the navel has not completely healedc. Females that have given birth in the previous seven days	Ma
TG4. Separation		
TG4.1	Alpaca shall be handled and transported separately from other species. The following separations shall also be applied: <ul style="list-style-type: none">a. Alpaca of significantly different sizes or agesb. Sexually mature males from femalesc. Animals hostile to each otherd. Tied animals from untied animals <p><i>NOTE: TG4.1 does not apply where animals have been raised in compatible groups, are accustomed to each other and where separation would cause distress or where animals are accompanied by dependent young.</i></p>	Mi



Number	Requirement	Level
TG5. Preparation for Transport		
TG5.1	Animals shall be appropriately prepared for transport, including through the provision of sufficient food and water, as appropriate to the species, age, condition, and expected length and conditions of the journey, so that pain, injury, or distress to themselves or other animals is avoided.	Ma
TG5.2	Before undertaking a journey during which the animals will be fed and watered, animals shall be familiarized with the feed to be offered and the methods by which the feed and water are given.	Mi
TG6. Transport vehicles and facilities for livestock		
TG6.1	The vehicle and its loading and unloading facilities shall be designed, constructed and maintained to avoid injury and suffering and to ensure the safety of the animals.	Ma
TG6.2	Ramps shall be set at an incline of no greater than 27 degrees and have measures in place to prevent injury.	Mi
TG6.3	Conveyances and containers shall be designed to ensure adequate ventilation or oxygenation to allow the free flow of air or oxygen to all animals, even when stationary, to prevent the build-up of harmful concentrations of gases or impurities, water vapor or temperature.	Mi
TG6.4	Conveyances and containers shall be designed to provide protection from adverse weather that may be a risk to the animal's health and welfare.	Mi
	In very cold weather a vehicle with a solid front must be used to reduce the wind chill factor.	
TG6.5	Where animals show signs of heat or cold stress or distress from exposure to noxious gases, immediate corrective action shall be taken.	Ma
TG6.6	Animals shall not be transported when climactic conditions are likely to cause significant discomfort or harm.	Mi



Number	Requirement	Level
	<p>Climatic conditions that can cause significant discomfort or harm include hot and cold temperature extremes, heavy snow, or freezing rain.</p> <p>If transport on days of extreme heat is absolutely necessary, the journey plan should minimize the effects of heat stress on animals with rest stops planned to be in areas of shade and perhaps a water source.</p> <p>Animals should only be transported during the cooler hours of the day. If it is necessary to stop, park the vehicle in the shade and at a right angle to the wind direction to improve wind flow between animals during hot weather. Duration of stops should be kept to a minimum to avoid the build-up of heat while the vehicle is stationary.</p> <p>Stocking densities should be reduced to 85 per cent of capacity to ensure good air flow between animals, and drivers should have contingency plans in place for adverse weather events.</p> <p>If alpaca are being transported in very cold weather, vehicles may need to be halted and parked in a protected area to prevent wind chill and hypothermia in the animals.</p>	

TG7. Loading and Unloading

TG7.1	Animals shall be loaded and unloaded in a way that minimizes the risk of pain, injury, or distress to the animals. The use of electric prodders is prohibited.	Ma
TG7.2	Alpaca shall not be dropped, dragged, or pulled by the fleece, tail, ears, head, limbs, or neck.	Ma
TG7.3	Stocking density shall be sufficient to allow animals to adopt a natural posture during the journey.	Ma
TG7.4	Alpacas shall not have their legs tied during transport.	Ma

TG8. Recommended space allowance

TG8.1	There shall be space for each alpaca to lie down (cush) during transport.	Mi
--------------	---	----



Number	Requirement	Level
--------	-------------	-------

TG8.1.1 Each alpaca should have the following minimum area in transport which should provide sufficient space for the alpaca to sit down during the journey:

R

Live weight (kg)	Minimum floor area (m ²)
20	0.4
30	0.5
40	0.6
50	0.7
60	0.8
80	1.0

TG9. Journey times, food, water, and rest

TG9.1 Journeys shall be direct, without any prolonged stops.

Ma

TG9.1.1. All animals should be transported for the shortest possible time.

R



If a farm takes alpacas to slaughter or market, they should not bypass a nearby site to go to a further destination without good reason. Journey times must comply with legislation.

TG9.2 Water, feed, and opportunity to rest shall be made available to animals as appropriate to meet their health needs.

Ma

TG9.3 After each 24 hours of travel non-pregnant adult alpaca shall have a rest period of at least 12 hours.

Ma

TG9.3.1 Alpacas between 6 to 12 months of age and pregnant females up to 7.5 months gestation shall have a rest period of at least 12 hours after every 8 hours of transport.

Ma



Number	Requirement	Level
--------	-------------	-------

TG9.3.2 Alpacas up to 6 months of age, lactating female alpacas and alpacas that are more than 7.5 months through their gestation shall have a rest period of at least 12 hours after every 4 hours of transport.



Travel duration is calculated from the time loading starts, time on the vehicle and unloading time. Note that females in their last 10% of gestation must meet the requirements of TG3.2. Journey times may only reach 24 hours for adult animals if this is permitted by legislation.

TG9.4	During every specified rest period, alpacas of all ages shall: <ul style="list-style-type: none"> a) be unloaded; b) have access to food and clean water c) have enough space for exercise and rest. 	Ma
--------------	---	----



Alpacas should have at least the following minimum area per animal during rest periods:

Type of animal	Minimum area per animal m ² (ft ²)
Less than 50kg (110lb)	1.2 (13)
Between 50 and 80 kg (111-176 lb)	1.8 (19)
Between 80 and 120 kg (176 to 264 lb)	2.1 (23)

TG9.5	Water and feed shall be provided at least once in every 24 hours to animals older than 12 months, except for animals traveling on a journey that will be entirely completed within 30 hours.	Ma
--------------	--	----


The relevant period for determining feed and water requirement is the total period of deprivation of feed and water from the time of initial loading until unloading after the second or last journey.

TG10. Monitoring and Records

TG10.1	Animals shall be inspected for injury or signs of pain or distress at regular intervals during the journey, including at rest breaks taken by the operator of the conveyance and at refueling stops.	Ma
---------------	--	----

TG10.2	Animals found to be distressed or injured shall be assisted, treated or if necessary, euthanized as soon as practicable.	Ma
---------------	--	----



Number	Requirement	Level
TG10.3	The mortality and injury rate shall be recorded.	Mi
	See Mortality Record Template under section AW5 See Injury Record Template under section AW3	



AW5. Management, Plans and Procedures



Desired outcome: Farmers have a clear strategy and set of protocols to safeguard the welfare of their animals, and to demonstrate compliance to the relevant RAS.

Number	Requirement	Level
AW5.1	Farmer shall comply with all applicable legislation on animal welfare and land management.	C
AW5.2	Parallel production is prohibited: all alpacas on the farm shall fall under RAS certification.	C
AW5.3	All other animals kept on the farm shall be treated humanely.	Ma
	AW5.3.1 Continuous confinement of any animal on the farm is prohibited. Animals shall receive nutrition, care, handling and veterinary attention as required for their health, safety and comfort.	Ma
AW5.4	Farmer shall give the auditor full access to the farm and operations that fall under certification.	C
	AW5.4.1 As directed by the auditor, this shall include access to: <ul style="list-style-type: none"> a) Buildings and pens b) Land c) Documents d) Alpacas e) Workers 	C
	The Certification Body will confirm ahead of the audit how many alpacas need to be available for viewing at the audit.	
AW5.5	Records shall be kept for a minimum of five years.	Mi



AW5.6

Mortality records shall be kept.

Mi



[Mortality Record Template](#)

AW5.6.1 If mortality rates fall outside expected levels, actions shall be taken, and the problem resolved.

Mi

AW5.6.2 Unexpected deaths and disease outbreaks shall be investigated, and remedial and preventive actions shall be taken.

Mi

AW5.7

An emergency plan shall be in place to maintain alpaca welfare in exceptional circumstances.

Ma

For Communal Farmer Groups, the emergency plan can be prepared at group level.

AW5.7.1 The emergency plan shall include measures that will be taken to ensure adequate feed and water are made available to alpacas in the event of situations such as drought, snowstorms and other exceptional circumstances.

Mi

AW5.7.2 A strategy shall be in place for the provision of shelter in the event of emergency situations caused by extreme weather events.

Mi

AW5.7.3 If animal welfare is at risk, which cannot be mitigated, arrangements shall be made to relocate, sell, or humanely euthanize alpacas to ensure their welfare is not adversely affected.

Mi



The farm must be able to describe actions they will take in response to exceptional circumstances that could be expected to occur in their region. Such circumstances could include drought, heavy snow/ice storms, bushfire/wildfire and flooding.



In situations where natural forages are less available than planned, such as during drought or heavy snow, adaptive management should be used to avoid long-term damage to forage resources. Factors in adaptive management may include adjusting stocking rates, decisions on number and timing of stock sales, building forage reserves, and using seasonal predictions of climate and other monitoring.



[Emergency Plan Template](#)



AW5.8	Quarantine procedures should be in place when new animals are introduced.	R
AW5.9	Farmer shall be knowledgeable on current and best practices regarding animal welfare and land management in alpaca production.	Ma
	AW5.9.1 Farmer shall have understood the requirements of RAS.	Ma
AW5.10	Workers shall be trained or experienced and competent in handling animals, and shall possess and practice the ability, knowledge and competence necessary to maintain the health and welfare of the animals. They shall be knowledgeable in current best practices for animal welfare and land management for alpaca production.	Ma
	AW5.10.1 Training records should be maintained.	R
	AW5.10.2 Workers shall be made aware of the relevant parts of the RAS.	Mi
AW5.11	All external workers that come onto the farm to perform work involving the alpacas shall be made aware of the relevant parts of the RAS.	Ma
	AW5.11.1 All subcontractors shall sign the RAS Contractor Declaration.	Ma



AW5. Management, Plans and Procedures: Templates



Templates

- [Mortality Record Template](#) (corresponding to AW5.6)
- [Emergency Plan Template](#) (corresponding to AW5.7)
- [Contractor Declaration](#) (corresponding to AW5.11.1)



Mortality Record Template

Corresponds to AW5.6.

Cause confirmed? (Post mortem result if carried out)													
Found dead or euthanized?													
Prior signs of illness (respiratory stress, off-feed, wasting)													
Reason for, or suspected cause of death													
Date of death													
Type of animal(s) (breeding male/female, unweaned/weaned cria)													
ID													



Emergency Plan Template

Corresponds to AW5.7.

Farm or Communal Farmer Group name:	Date of last review of plan:	Date plan due for review:

Emergency	Risk of occurrence on farm (High/Medium)	Actions
<i>e.g. drought</i>	<i>e.g. high</i>	<i>e.g. keep a stock of forage, reduce alpaca numbers, move alpacas to new ground when local water sources dry up</i>
<i>e.g. wildfire</i>	<i>e.g. medium</i>	<i>e.g. establish “safe areas”, monitor local fire reports, move high value animals to low risk areas, ensure personal safety</i>
<i>e.g. flooding</i>	<i>e.g. high</i>	<i>e.g. monitor weather conditions, move animals to high (dry) ground</i>
<i>Other</i>		
<i>Other</i>		



Responsible Alpaca Standard 1.0
© 2021 Textile Exchange



Contractor Declaration

Corresponds to AW5.11.

Over the years and recently, fiber production has come into focus for brands and consumers; certain animal rights organizations have shone a harsh light on poor practices in farming, even if the reality is that these practices are not typical of most farming systems.

More and more companies are asking questions about where their fiber comes from and under what conditions it was produced. Customers are not just asking but demanding that their supply of fiber be humane. The Responsible Alpaca Standard (RAS) is the tool to give everyone the confidence they need that they are buying fiber that is from alpaca that have been well treated, and from farms that care for their land.

All farms supplying RAS fiber undergo full certification to verify that the goals and requirements of the standard are met. In addition to the audit, we are asking any subcontractors coming onto the farm to deal directly with the alpacas to fill in the declaration that follows.



Contractor Declaration

I, _____, declare that I have reviewed the Responsible Alpaca Standard, and understand its intent.

I commit to ensure that the animals that my crew and I work with are treated with care. In particular, I will ensure that the following requirements of the RAS are met as they apply (*please initial beside each one*):

Number	Requirement	Initial
AW3.9	Castration shall only be carried out on males that are being kept beyond puberty.	
	AW3.9.1 Pain relief shall be applied when castration is carried out.	
	AW3.9.2 The procedure shall only be performed using surgical methods (i.e. scalpel).	
	AW3.9.3 The procedure shall be carried out by the time the alpaca reaches 12 months of age.	
	AW3.9.4 Farmers shall monitor for signs of post-operative complications and take appropriate corrective actions.	
AW3.13	Shearing shall be performed by, or under the direct supervision of, a competent shearer.	
	AW3.13.1 Shearing shall be carried out under the direct supervision of the farmer or a person appointed by the farmer.	
	AW3.13.2 Shearing shall be done using techniques and equipment designed to minimize stress and injury.	
	AW3.13.3 Particular care shall be taken not to cut or injure the animal, especially the teats/udders of female alpacas and the penis/sheath and scrotum of males.	
	AW3.13.4 An action plan shall be instituted to address and prevent any recurring problems with injuries or mishandling.	



Number	Requirement	Initial
	AW3.15.5 Written and/or visual “Shearing Standard Operating Procedures” shall be posted in a visible location of the shearing shed.	
AW3.14	Alpacas shall be handled calmly and confidently to minimize stress at shearing.	
	AW3.14.1 Restraint shall be for the minimum time required to effect shearing.	
	AW3.14.2 If alpacas are restrained with ropes for shearing these shall be tied in a way that does not restrict blood flow.	
	AW3.14.3 Ropes that are soft and do not abrade the skin shall be used if alpacas are restrained with ropes.	
	AW3.14.4 At least two people shall be available to lift and restrain an alpaca for shearing.	
	AW3.14.5 Restrained alpacas shall be under constant supervision.	
	AW3.14.6 Restrained alpacas shall be released from restraint if they are struggling so much that they might injure themselves.	
	AW3.14.7 Alpacas shall be restrained in positions that ensure they cannot inhale regurgitated stomach contents.	
	AW3.14.8 Alpacas shall not be sheared lying directly on concrete or bare earth.	
	AW3.14.9 Alpacas should be placed on a mat if they are sheared when they are lying down.	
AW3.16	All shearing related injuries shall be attended to promptly.	
	AW3.16.1 In the event of a severe cut or injury the shearer shall cease shearing immediately to treat the injury.	
	AW3.16.2 Pain relief shall be applied for serious injuries when suitable pain relief is available.	



Number	Requirement	Initial
	AW3.16.3 Records of serious injuries shall be kept.	
AW4.1	Animals shall be handled humanely; mistreatment of animals is unacceptable.	
	AW4.1.1 Mistreatment includes rough physical contact such as kicking, striking, slamming gates on the alpacas, tripping, throwing or dropping animals, dragging or pulling alpacas by the fleece, tail, ears, head or neck, or dragging by the back legs.	
	AW4.1.2 Extra care shall be taken when handling alpacas with special needs, such as young crias, heavily pregnant females, lame alpacas and breeding males. Heavily pregnant females shall only be handled when absolutely necessary.	
	AW4.1.3 Electric prodders shall not be used.	
	AW4.1.4 Halters must be fitted so as not to obstruct breathing.	
	AW4.1.5 Chukkering is prohibited	

In the event that it comes to my knowledge that any of the above requirements for any reasons are not met, I will inform the certification body immediately.

Name: _____ Date: _____





Section C – Land Management Criteria



LM1. Soil







Desired outcome: Farmers have an understanding of what will impact the health of their soil and have a strategy to mitigate damage and improve soil health.

Number	Requirement	Level
LM1.1	Land shall not be degraded by overgrazing and/or other management techniques.	Ma
	LM1.1.1 Soil and land health including forage resources, soil erosion, compaction, organic matter and any other areas of risk relevant to the farm, shall be addressed through actions and in a written management plan.	Mi
	<i>For Communal Farmer Groups the written management plan for soil, land health, and biodiversity can be prepared at group level.</i>	
	Local agricultural agencies may provide guidance on the factors influencing social health in their local region and provide advice on strategies and techniques that will help with developing a plan for soil and land health.	
	See: Communal Farmer Group Land Management, Soil Health and Biodiversity Plan Template	
LM1.2	Soil compaction shall be monitored and managed.	Ma
	LM1.2.1 Steps shall be taken to prevent or minimize soil compaction and to restore damaged areas.	Ma
LM1.3	Soil erosion shall be monitored and managed.	Ma



Number	Requirement	Level
LM1.3.1	Steps shall be taken to prevent or minimize soil erosion and to restore damaged areas.	Ma
LM1.3.2	The risk of sedimentation of water bodies with soil from fields should be assessed and managed (e.g. erosion control, avoidance of compaction, and riparian buffer strips).	R
	<p>Check your land for areas where erosion is likely to happen and take into account the factors that will cause it. The type of soil, the slope of the land, animal traffic, wind, water, and tillage may affect erosion.</p> <p>Prevention of Soil Erosion:</p> <p><i>Grazing Planning:</i> Erosion prone areas should not be grazed in sensitive times of the year and grazing pressure should be monitored regularly to avoid overgrazing.</p> <p><i>Windbreaks and Shelterbelts:</i> Often additional protection from the wind is necessary when there is not enough residue to hold soil in place. Windbreaks and shelterbelts can provide that protection by slowing down wind speeds near the ground. Windbreaks also create a microclimate, raising soil and air temperatures adjacent to the trees, reducing drying winds and accumulating more snow. These effects also provide crop yield increases.</p> <p><i>Fragile Land Retirement:</i> Occasionally, the erosion cannot be controlled on a field or part of a field. The erosion may be too extreme, or the field has some other limitation, making it unprofitable or unsustainable to farm. Fragile land could include areas along creeks, lakes and wetlands that may be subject to flooding or other land that is subject to severe erosion. This land should be retired from production to forest or pastureland.</p>	
	See Guidance note 'Soil Management Practices to Reduce Soil Erosion'	
LM1.4	Soil organic matter shall be monitored and managed.	Mi
	LM1.4.1 Steps shall be taken to prevent or minimize loss of soil organic matter and to restore damaged areas.	Mi



Number	Requirement	Level
	<p><i>Organic matter on grazed lands</i></p> <p>Increasing or decreasing Stocking Rates is usually the best tool to manage soil organic matter in a rangeland situation. The Holistic Management approach promoted by the Savory Institute has seen excellent results, and resources are available at savory.global.com</p> <p><i>Organic matter on cropping lands</i></p> <p>Soil needs to be monitored at an interval where farmers can demonstrate they are managing the health of their soil; that could be yearly or every 5 years but there must be a system in place. Soil testing will provide organic matter levels and it is best to work with the local agriculture department to determine what levels are acceptable, when improvement is needed and the best methods to use.</p> <p>The tillage practices recommended to limit soil erosion will also help to preserve organic matter.</p>	
<p>LM1.5</p>	<p>The farmer shall monitor key indicators of land health.</p> <p>LM1.5.1 Monitoring sites shall be set for pasture composition and soil degradation.</p> <p>LM1.5.2. Where there is grazing on public lands, the farmer shall demonstrate that that the criteria designated by the permitting authority are met or exceeded.</p>	<p>Mi</p> <p>Mi</p> <p>Mi</p>
  	<p>Monitoring systems should be designed to detect changes due to grazing and other management and to gain objective information on the progress towards sustainable management of the land.</p> <p>See Monitoring Point Guidance Note for individual farmers and farmer group members.</p> <p>See Communal Farmer Group Land Management, Soil Health and Biodiversity Plan Template for information on monitoring for Communal Farmer Groups.</p>	
<p>LM1.6</p>	<p>Hazardous materials shall not be disposed of on the farmland unless specifically allowed by law and it is safe to use the affected land for grazing.</p>	<p>Ma</p>



Number	Requirement	Level
	<p>Farm wastes that are considered inappropriate are any that may pose risks to human or animal health, water or soil quality. These may include waste from:</p> <ul style="list-style-type: none">• Animal health products (medicines, sharps, etc.)• Chemicals (fertilizers, pesticides, cleaning agents, antifreeze, etc.)• Certain building materials (asbestos, contaminated concrete, etc.)• Batteries• Equipment containing refrigerants (freezers, air conditioners, etc.)• Lubricating oils or filters• Paints or coatings• Machinery tires• Pressurized containers• Devices containing mercury (thermometers, fluorescent bulbs, thermostats, electrical switches, etc.)	



LM1. Soil: Guidance Notes and Templates



Guidance Notes

- [Soil Management Practices to Reduce Soil Erosion](#)
- [Monitoring Point Guidance for Individual Farmers and Farmer Group Members.](#)



Templates

- [Communal Farmer Group Land Management, Soil Health and Biosecurity Plan Template](#)



Guidance Note: Soil Management Practices to Reduce Soil Erosion

Reduced Tillage

Effect:

- leaves residue on the soil surface, effectively controlling erosion
- loosens less soil
- prevents soil from being moved down slope by tillage implements

Other Benefits:

- improved water infiltration
- reduced organic matter loss
- improved soil structure

Use against erosion caused by:



Adding organic materials

Effect:

- leaves residue on the soil surface, effectively controlling erosion
- loosens less soil
- prevents soil from being moved down slope by tillage implements

Other Benefits:

- improved water infiltration
- reduced organic matter loss
- improved soil structure

Use against erosion caused by:





Crop rotation

Effect:

- protects the soil by keeping the soil surface covered year round (grass and legume forage crops)
- helps hold soil in place with the extensive root systems (perennial crops)
- helps protect the soil from fall through to harvest (fall-planted annual crops such as winter wheat)

Other Benefits:

- improved soil structure and less soil compaction because of root systems
- improved water infiltration
- higher yields
- reduction in insect and disease build-up

Use against erosion caused by:



Cover crops

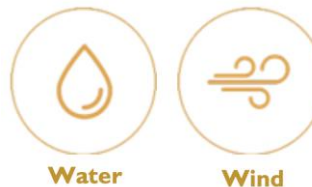
Effect:

- protect the soil by covering it when it might otherwise be left bare
- help improve soil structure to resist erosion and improve infiltration, less runoff due to added organic matter
- soil held in place by the roots

Other Benefits:

- increase organic matter levels
- help hold onto nutrients from recently applied manure
- provide forage
- weed and nematode suppression

Use against erosion caused by:





Monitoring Point Guidance for Individual Farmers and Farmer Group Members.

See the *Communal Farmer Group Land Management, Soil Health and Biosecurity Template* for information on monitoring for Communal Farmer Groups.

Long term monitoring is important to detect changes on the land and gain objective information on the progress towards sustainable management of the farm. The minimum requirements of the RAS are to have a formal monitoring plan and an adequate monitoring.

What is a monitoring point system?

A monitoring system means setting a number of specific locations on your farm to be regularly checked. Regularly recording observations allows you to observe changes over time.

For Land Classes 1-3

Pasture, vegetation and soil monitoring are required.

For Land Classes 4,5

Pasture and vegetation monitoring are required.

A Monitoring Point System involves three key steps:

1. Select monitoring points.
2. Select monitoring method at each point.
3. Record information annually from each point.

Select Monitoring Points

Choose set points to monitor from. These points will be used every year.

GPS coordinates may help identify the points. They may also be marked with a post. Locations for monitoring should be chosen to include:

Representative points: Should reflect the general situation of a paddock. These points should be chosen to truly represent the overall area of interest. You may choose to select a point to represent each soil type or pasture type on your farm (e.g. high elevation, mid elevation, low elevation, or riparian zones).

Critical points: These points should be chosen based on the important changes that may be happening on the farm. For example, a patch where invasive species are taking over, or a fragile spot where there are active erosion processes.

Benchmark points: These points are selected as representative of the best state and trend of the site. It may or may not be inside the farm.



The number of points chosen for monitoring should be based on the size of the farm.

Total Farm Area (hectares)	Minimum # of monitoring stations
2500 or less	3
10000	4
20000	6
60000	14

Select Monitoring Methods

Monitoring methods vary in complexity, time required, cost, and quality of information. We have included descriptions of photographic plots, transects, and cages.

Photographic plots

Photographs are regularly taken from a given point (e.g. a transect stake) in the same direction. The images may be used as a condition reference to estimate condition without completely repeating all measurements.

Photographic plots are cheap, easy to install and generate valuable information to track structural changes in soil and vegetation.

Transects

Transects is a specific line or length of land that transects the pasture and allows the farmer to collect more detailed information, such as the percentage of each species on a site, the percentage of bare ground, or the number of plants utilized by the alpacas

This information provides information on the state of the vegetation and its long-term trend. The process is easily repeated to allow validation of recorded results.

Line Transects – A linear measurement of plant community and characteristics that may be used for site evaluation. Line transects usually involve randomly selecting a representative site and placing a marker. The evaluator randomly chooses a compass direction (the site and direction will be marked and recorded for repeatability) and a line, tape, or rope of 50 or 100 meters is used to mark the line. Measurements of species occurrences, canopy, groundcover, and other factors can be recorded at predetermined increments along the line. This



measurement process can be repeated each time by restringing the line and re-measuring the desired factors and elements.

Pace Transects – Similar to line transects but no line is necessary. A transect stake is established and a magnetic direction chosen by compass, just as with a line transect. The evaluator simply takes paces along the imaginary line direction and records the findings that occur at the point of his shoe or boot. This method should be conducted by the same evaluator each time – or by someone with a similar stride length and recording criteria – to maintain replication accuracy.

At least 30% of your monitoring points should be transects.

Cages

Cages are set up at one location for the duration of a season. The cage prevents the area from being foraged by animals. This allows you to observe the growth rate of the site when undisturbed. New growth for the season can be accurately measured by comparing the inside of the cage with the outside. You may also observe how much the animals have eaten of the year's active growth. Cages may be used for multiple years to measure the cumulative effects of long-term grazing in the area.

Other forms of monitoring may also be used.

Record information

If you have never used a monitoring point system, the information collected during the first year of the monitoring point system is very important to define the current status of your pasture. This information should be as extensive as possible.



In following years, information should be collected and recorded at the same time of the year at each monitoring point.

Monitor type	Complexity	Frequency	Information obtained
Photographic plot	Minimal	Once per year	Visual comparisons (vegetation and pasture structure)
Transects	Medium	Once per year	<p>Vegetation</p> <ul style="list-style-type: none"> • coverage (type and number) • invasive species <p>Pasture</p> <ul style="list-style-type: none"> • soil tests • compaction • presence of soil organic matter
Cages	Medium	One year, change position each year.	<p>Vegetation</p> <p>amount of new growth per season</p> <p>forage rates</p>



LM2. Biodiversity and Water



Desired outcome: Farmers have an understanding of what will impact of the biodiversity of their land and have a strategy to protect and improve it over time.

Number	Requirement	Level
--------	-------------	-------

LM2.1

The farm shall develop a Biodiversity Management Plan (BMP) that conserves and enhances biodiversity on and around the farm.

Ma

For Communal Farmer Groups the written management plan for biodiversity can be prepared at group level. The template provided incorporates the Biodiversity Management Plan requirements.



The BMP should include the following components:

- i. a map that clearly identifies areas important for biodiversity, including natural ecosystems, native vegetation and water bodies; any ecosystems known to support protected, threatened or endemic species; animal migratory corridors; and any areas of degraded land.
- ii. confirmation whether the farm is located either in a Protected Area or Key Biodiversity Area, and identification of the biodiversity values for which the site has been designated.
- iii. time-bound actions that will be implemented to manage, restore and enhance ecosystems on the farm.
- iv. time-bound actions that will be implemented to support populations of any protected, threatened or endemic species known to occur on the farm.
- v. monitoring of the extent and condition of the areas important for biodiversity.




A Biodiversity Management Plan (BMP) is a strategic framework for conserving, restoration and enhancement of biodiversity value of a farm. The BMP sets the objectives and describes the management actions necessary to deliver the desired outcomes. The actions should be specific, measurable, achievable, and time bound. The BMP should be reviewed annually and updated at least every five years and identify



Number	Requirement	Level
	<p>roles and responsibilities of individuals required to implement the actions. It is recommended that local biodiversity experts are consulted for advice on the relevant biodiversity values to include in the BMP, as well as to provide suggestions on measures to protect, restore and enhance areas important for biodiversity.</p> <p>As part of the BMP, the Farm or Communal Farmer Group must develop a map of their land that clearly identifies areas important for biodiversity, including natural ecosystems, native vegetation and water bodies; any ecosystems known to support protected, threatened or endemic species; animal migratory corridors; and any areas of degraded land.</p> <p>This map provides a baseline of the extent and condition of natural ecosystems that informs the management actions required for their conservation and enhancement, as well as a basis for ongoing monitoring.</p> <p>Natural ecosystems are defined as ecosystems that substantially resembles one that is or would be found in a given area in the absence of major human impacts. This includes human-managed ecosystems where much of the natural species composition, structure, and ecological function are still present. This can include ecosystems that might have been subject to major impacts in the past (for instance by agricultural cultivation, tree plantations, or intensive logging), but where it has re-attained a natural species composition, structure and ecological function. It can also include managed natural ecosystems where much of the ecosystem's composition, structure, and ecological function are present, such as managed natural forests and native grasslands or rangelands that are, or have historically been, grazed by livestock. Natural ecosystems may be partially degraded by anthropogenic or natural causes (e.g., harvesting, fire, climate change, invasive species), but have not been converted to another land use.</p> <p>The following are all considered to represent natural ecosystems and should be defined on the map:</p> <ul style="list-style-type: none">• All types of natural forests (broadleaf, needleleaf, evergreen, deciduous and semi evergreen),• All types of natural water body: lakes, ponds, springs, rivers and streams, whether permanent or seasonal.• Other wetlands, where soils are waterlogged for most of the year (e.g. swamps, fens and peat bogs), or land which is periodically flooded (e.g. flood plains).	




Number	Requirement	Level
	<ul style="list-style-type: none"> • Shrubland, savanna and Paramo • Grasslands comprising predominantly of native plant species – likely to include land classified under RAS as Land Classes 4 and 5. • Areas of non-forest natural vegetation within areas of forest. <p>Protected species are any species that are protected from harm under legislation in the country in which the Farm or Communal Farmer Group is located. Threatened species include any species categorized as Critically Endangered, Endangered or Vulnerable by the IUCN Red List of Threatened Species: https://www.iucnredlist.org/. An endemic species is any species whose global range is restricted to a limited geographical area (either a country or less than 50,000 km²).</p> <p>An essential element of the defined actions to conserve, restore and enhance ecosystems will be consideration of the appropriate grazing management in each area managed by the Farm or Communal Farmer Group, taking into account the relevant land class of each pasture, the presence of native vegetation and Natural Ecosystems.</p>	
	<p>Biodiversity Management Plan Template</p> <p>Communal Farmer Group Land Management, Soil Health and Biodiversity Plan Template</p>	
<p>LM2.2</p>	<p>Forage resources shall be monitored and grazing will be managed to protect, restore and enhance the biodiversity value of the farm.</p> <p>LM2.2.1 There shall be no grazing of areas important for biodiversity in times of the year when it could have a negative impact on natural ecosystems, native vegetation or on wildlife species.</p> <p>LM2.2.2 Livestock stocking rates and grazing management practices shall be adjusted to avoid negative impacts to areas important for biodiversity (e.g. from overgrazing, compaction, or erosion).</p> <p>LM2.2.3 Livestock stocking rates and grazing management practices shall encourage biodiversity and reflect the importance of native species within pastures.</p>	<p>Mi</p> <p>Mi</p> <p>Mi</p> <p>Mi</p>



Number	Requirement	Level
LM2.2.4	Any areas of degraded land shall be identified in the Biodiversity Management Plan, along with appropriate restoration measures.	Mi
	<p>For some natural ecosystems, it might be appropriate to exclude livestock from natural habitats entirely. Other natural ecosystems such as grassland, shrublands and savanna in part owe their origin to grazing over millennia and its continued presence can be essential to maintain biodiversity.</p> <p>Pastures comprising native vegetation require careful management to avoid negative impacts such as overgrazing, soil erosion and loss of sward diversity. Seasonal grazing restrictions may be required to protect specific features (e.g. ground-nesting birds, wild flowers or tree regeneration), or in response to short-term changes in conditions due to weather (e.g. droughts or flooding). The most appropriate stocking density and grazing regime for a specific pasture depends on a wide range of factors such as vegetation types, soil type, fertility and climate, as well as annual variation in weather. Therefore, the appropriate stocking density and grazing regime should be based on careful monitoring of forage resources. The following should be taken as signs of overgrazing:</p> <ul style="list-style-type: none">• Short grass heights over large areas.• Dominance of inedible plant species• Frequent areas of bare or poached ground.• Large amounts of dung.• Frequent uprooted vegetation. <p>Degraded Land is defined by the United Nations Convention to Combat Desertification (UNCCD) as land that has lost its land cover, biological or economic productivity, and carbon stocks. This represents land that is likely to have lost the majority of its biodiversity or productive agricultural value. Indicators of degradation include absence of perennial vegetation (e.g. from over-grazing) areas affected by soil erosion, soil salinization and water scarcity.</p> <p>Restoration of degraded land can be a challenge and will likely require solving the underlying factors that that caused the degradation in the first instance. In the case of overgrazing, this may require the exclusion or significant reduction in stocking densities in the affected areas. If soil</p>	



Number	Requirement	Level
	<p>erosion is continuing, techniques to stabilize the soil structure are likely to be required. The re-establishment of vegetation is an objective of restoring degraded areas and can be very effective method to stabilize soils. This may require the use of different species and vegetation types than those that existed prior to the degradation took place (e.g. use of halophytic plants in salinized soils).</p> <p>Additional resources:</p> <p><i>Signs of Overgrazing:</i></p> <p>http://www.uwyo.edu/barnbackyard/_files/documents/magazine/2009/summer/recognizing-overgrazing-summer-bb-2009.pdf</p> <p>http://people.oregonstate.edu/~muirp/genconce.htm</p> <p><i>Regenerative Farming</i></p> <p>https://www.savory.global</p>	
LM2.3	The farmer shall monitor and manage invasive alien species of flora or fauna on the farm.	Mi
	LM2.3.1 The farmer shall not intentionally introduce any invasive alien species, and shall implement measures to avoid accidental or unintended introduction (e.g. through the transportation of soil, plant materials, water, etc.).	Mi
	LM2.3.2 Where invasive alien species are present on a farm, the farmer shall adopt measures to avoid their spread and eradicate them from natural ecosystems.	Mi
	<p>Invasive alien species are plants and animals that have been introduced outside of its natural geographic range and whose introduction and/or spread threatens biological diversity. Invasive alien species can also pose threats to economic activity and human / animal health (e.g. as a vector of disease). Preventing the introduction of invasive alien species in the first place is the most effective strategy and Farms should implement robust biosecurity. Vehicle wheels, dirty boots and equipment can all carry seeds, spores, eggs etc., and should be washed when re-entering the Farm. Importing soil, manure, compost, plant material or water also pose a risk of carrying invasive alien species.</p> <p>If introduced, the quicker that control measures can be instigated when invasive alien species following introduction, the more likely that they will</p>	



Number	Requirement	Level
	<p>be effective. It is also likely to be more cost-efficient compared to needing to instigate control programs for species that have become firmly established on the Farm. This demonstrates the benefits of having an effective monitoring program for invasive alien species. Monitoring may be done on an ongoing basis, during the regular farm inspections. If any invasive alien species are detected, these should be mapped to record their distribution and density. This should be updated as control measures are implemented to monitor effectiveness. Local government authorities may warn of potential problems and advise on treatment strategies.</p> <p>Additional Resources</p> <p>The Global invasive species database provides information about invasive alien that pose a threat to biodiversity and provides advice on prevention and management advice. It covers all taxonomic groups including micro-organisms, plants, and animals. http://www.iucngisd.org/gisd/</p>	
LM2.4	Farms shall implement measures to minimize livestock-wildlife conflicts.	Ma
	LM2.4.1 The population and behavior of predators shall be monitored.	Mi
	LM2.4.2 The farm should adopt proactive co-existence planning to deter predators.	R
	LM2.4.3 Wildlife corridors or routes used for migration should be maintained, if these are known to exist on the farm.	R
	<p>Large predators play an important role in maintaining the integrity and resilience of ecosystems, through their control of prey populations. However, many large predators are threatened globally, with their populations increasing fragmented. Large predators typically require large territories and therefore it is important that where they occur on Farms, they continue to be provided habitat for hunting, breeding and the ability to roam. Equally, Farmers have a duty to protect their livestock. The foundation of managing livestock-wildlife conflict is a good understanding of the ecology and behavior of the species involved. Farmers should monitor predator populations on an ongoing basis, during regular farm inspections. The monitoring may be based on sighting of the animals themselves, or of their tracks and signs (e.g.</p>	




Number	Requirement	Level
	<p>scats). The use of camera traps can greatly improve the ability to monitor large predators, especially if they are nocturnal. https://www.researchgate.net/profile/Paul_Glover-Kapfer/publication/320402776_Camera-trapping_for_conservation_a_guide_to_best-practices/links/59e235f4458515393d57ed8e/Camera-trapping-for-conservation-a-guide-to-best-practices.pdf</p> <p>A wide range of management practices may be employed to manage livestock-wildlife conflict, including:</p> <ul style="list-style-type: none"> • Adaptive Grazing Planning. Grazing certain pastures when predation pressure is low; • Mixing larger livestock with alpacas to provide greater protection; • House or corral alpacas in a secure location at night and for birthing; • Timing birthing to reduce predation risk (e.g. avoid birthing when predators are feeding young; • Use of Livestock Guardian Dogs, Llamas and Donkeys; • Use of Barriers and Mechanical Deterrents; and • Making frequent and unpredictable patrols of pastures. <p>See http://www.wildlifefriendly.org/resources/.</p>	
LM2.5	Hunting, fishing or gathering of protected, threatened or endemic plant or animal species is prohibited.	Ma
LM2.6	Lethal control of predators shall only be used as a measure of last resort, if permitted legally and when carried out humanely.	Ma
LM2.6.1	Lethal control shall target the specific, individual animals(s) that is/are creating the conflict.	Ma
LM2.6.2	Lethal control of any animal shall result in instantaneous unconsciousness and death.	Ma
LM2.6.3	Use of poison, leg hold traps, and snares are prohibited.	Ma
LM2.6.4	Lethal control is not permitted for protected, threatened, or endemic predator species.	Ma



Number	Requirement	Level
	<p>LM2.6.5 Each time lethal control methods are used, a record of all killed animals shall be kept (including date, species, and reason for use of lethal methods). The non-lethal methods to minimize livestock-wildlife conflicts shall be immediately reviewed to identify improvements to avoid further conflict.</p> <p>It must be demonstrated that all non-lethal methods have been exhausted before lethal control or live trapping is considered as an option. If used, live traps shall be managed to target the specific problem animal and shall be checked at least twice every 24 hours.</p> <p>Lethal control or live trapping should only be carried out if it is legal in the country of operation. It is the Farmer’s responsibility to check the relevant legislation in the country of operation to ensure that control measures are legally permitted, and that the species involved is not protected by law. Lethal control is not permitted for protected, threatened or endemic predator species. The IUCN Red List provides details on threatened and endemic species https://www.iucnredlist.org/</p>	<p>Mi</p>
<p>LM2.7</p>	<p>Deforestation and the conversion of natural ecosystems to agricultural land is prohibited.</p> <p>LM2.7.1 Existing native vegetation within the productive areas of the Farm shall be protected and maintained, including:</p> <ul style="list-style-type: none"> a) existing vegetated zones adjacent to aquatic ecosystems; b) traditional field boundary features such as hedgerows and ditches, and c) large native trees <p>LM2.7.2 Deforestation and the conversion of natural ecosystems to agricultural land shall not have occurred, June 1, 2016 onwards.</p>	<p>Ma</p> <p>Ma</p> <p>Ma</p>
	<p>Deforestation is the loss of natural forest as a result of conversion to agriculture or other non-forest land use. It also includes the conversion of natural forest to a tree plantation or severe and sustained degradation. Conversion is the change of a natural ecosystem to another land use or profound change in a natural ecosystem’s species composition, structure, or function. Conversion includes severe degradation or the introduction of management practices that result in substantial and</p>	



Number	Requirement	Level
	<p>sustained change in the ecosystem’s former species composition, structure, or function.</p> <p>The following are all considered to represent natural ecosystems and should not be subject to conversion:</p> <ul style="list-style-type: none"> • All types of natural forests (broadleaf, needleleaf, evergreen, deciduous and semi evergreen), • All types of natural water body: lakes, ponds, springs, rivers and streams, whether permanent or seasonal. • Other wetlands, where soils are waterlogged for most of the year (e.g. swamps, fens and peat bogs), or land which is periodically flooded (e.g. flood plains). • Shrubland, savanna and Paramo • Grasslands comprising predominantly of native plant species – likely to include land classified under RAS as Land Classes 4 and 5. • Areas of non-forest natural vegetation within areas of forest. 	
<p>LM2.8</p> 	<p>Production activities shall not degrade or significantly impact the biodiversity values for which a Protected Area or Key Biodiversity Area are designated.</p> <p>Protected Areas are a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. The Protected Planet web portal is the most up to date and complete source of information on protected areas.</p> <p>https://www.protectedplanet.net/</p> <p>Key Biodiversity Areas (KBAs) are sites that contribute significantly to the global persistence of biodiversity. They are defined according to A Global Standard for the Identification of Key Biodiversity Areas. The location of KBAs, along with details on the biodiversity values for which a KBA has been designated may be found on the World Database of Key Biodiversity Areas™.</p> <p>http://www.keybiodiversityareas.org/home</p> <p>Farmer should consult these web-based resources and identify whether the Farm is located in a Protected Area of KBA.</p>	<p>Ma</p>



Number	Requirement	Level
	<p>Degrade is defined as changes within a natural ecosystem that significantly and negatively affect its species composition, structure, and/or function and reduce the ecosystem’s capacity to supply products, support biodiversity, and/or deliver ecosystem services.</p> <p>The IUCN has developed guidelines for businesses operating within Key Biodiversity Areas:</p> <p>https://www.iucn.org/theme/business-and-biodiversity/our-work/business-approaches-and-tools/business-and-key-biodiversity-areas</p>	
LM2.9	<p>Aquatic ecosystems and water bodies shall be conserved and enhanced.</p> <p>LM2.9.1 River banks should be managed to keep erosion and soil run-off to a minimum.</p> <p>LM2.9.2 Riparian ecosystems should be protected and restored, as part of the Biodiversity Management Plan.</p> <p>LM2.9.3 Buffer zones should be maintained adjacent to wetlands and watercourses, within which fertilizer, manure and pesticide applications should be restricted.</p> <p>LM2.9.4 Natural wetlands shall not be drained.</p>	<p>Mi</p> <p>R</p> <p>R</p> <p>R</p> <p>Mi</p>



LM2. Biodiversity: Guidance Notes and Templates



Templates

- [Biodiversity Management Plan](#)
- [Communal Farmer Group Land Management, Soil Health and Biosecurity Plan Template](#)



Biodiversity Management Plan

For individual farmers and farmer group members.

Farm Name:

Location:

Date:

Completion of this template meets the requirements of LM2.1



1. Biodiversity Management Plan

1.1 Objectives

A Biodiversity Management Plan (BMP) is an implementation plan for conserving, restoration and enhancement of biodiversity value of a farm. The BMP sets the objectives and describes the management actions necessary to deliver the desired outcomes. The actions should be specific, measurable, achievable, and time bound.

The objective of the Farm Biodiversity Management Plan (BMP) is to conserve and enhance biodiversity on and around the farm.

The Farmer must ensure that decisions made in relation to direct production practices such as animal husbandry, cultivation, and crop protection take account of this BMP and its objective to conserve and enhance the biodiversity on and around the farm.

1.2 Farm Details

Brief description: size, location (grid reference), soils, livestock, crops, rotation, cultivation techniques etc.



1.3 Landscape

Protected Areas (PA) and Key Biodiversity Areas (KBAs) contribute significantly to the global persistence of biodiversity. It is important that Farmers are aware if they are operating in an PA or KBA and that they do not negatively impact these sites. A PA is a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives. They may include the following: Nature Reserves; Wilderness Areas; National Parks; Natural Monuments; Habitat Management Areas; Protected Landscapes; and Protected areas with sustainable use of natural resources.

Confirm whether the farm is located either in a Protected Area or Key Biodiversity Areas and identify the biodiversity values for which the site has been designated.

Protected Areas are shown on the following web portal: <https://www.protectedplanet.net/>.

World Database of Key Biodiversity Areas provides a searchable map of Key Biodiversity Areas at the following website: <http://www.keybiodiversityareas.org/sites/search>.

Also confirm which river catchment(s) the Farm is situated.

1.3.1 Protected Areas:

1.3.2 Key Biodiversity Areas:

1.3.3 River Catchments



1.4 Farm Map

As part of the BMP, the Farm must develop a map of the Farm that clearly identifies areas important for biodiversity, including natural ecosystems, native vegetation and water bodies; any ecosystems known to support protected, threatened or endemic species; animal migratory corridors; and any areas of degraded land.

Natural ecosystems are defined as ecosystems that substantially resembles one that is or would be found in a given area in the absence of major human impacts. This includes human-managed ecosystems where much of the natural species composition, structure, and ecological function are still present. This may include ecosystems that might have been subject to major impacts in the past (for instance by agricultural cultivation, tree plantations, or intensive logging), but where it has re-attained a natural species composition, structure and ecological function. It can also include managed natural ecosystems where much of the ecosystem's composition, structure, and ecological function are present, such as managed natural forests and native grasslands or rangelands that are, or have historically been, grazed by livestock. Natural ecosystems may be partially degraded by anthropogenic or natural causes (e.g., harvesting, fire, climate change, invasive species), but have not been converted to another land use.

The following are all considered to represent natural ecosystems and should be defined on the Farm map:

- All types of natural forests (e.g. broadleaf, needleleaf, evergreen, deciduous and semi evergreen),
- All types of natural water body: lakes, ponds, springs, rivers and streams, whether permanent or seasonal.
- Other wetlands, where soils are waterlogged for most of the year (e.g. swamps, fens and peat bogs), or land which is periodically flooded (e.g. flood plains).
- Shrubland, savanna and Paramo
- Grasslands comprising predominantly of native plant species – likely to include land classified under RAS as Land Classes 4 and 5.
- Areas of non-forest natural vegetation within areas of forest.



2. Biodiversity on the Farm

2.1 Natural Ecosystems on the Farm

List all of the natural ecosystems on the Farm and record their extent and condition in terms of percentage vegetation cover and percentage of native species at the initial completion of the BMP, to act as a baseline for future monitoring (see Section 1.9).

Natural Ecosystem	Extent (ha)	Vegetation coverage (%)	Percentage native species %

2.2 Important Species on the Farm

Protected species are any species that are protected from harm under legislation in the country in which the Farm is located. Threatened species include any species categorized as Critically Endangered, Endangered or Vulnerable by the IUCN Red List of Threatened Species: <https://www.iucnredlist.org/>.

An endemic species is any species whose global range is restricted to a limited geographical area (either a country or less than 50,000 km²). Keystone species are species whose influence on ecosystem function and diversity are disproportionate to their numerical abundance. These can include large mammalian predators, large herbivores, or key pollinators and seed dispersers.

List the known protected, threatened, endemic, and keystone species and identify which ecosystems on the Farm support each species.



Species name	Species Category (Protected, threatened, endemic, keystone species)	Ecosystems important for the species

2.3 Alien Invasive Species and Degraded Land

Any areas of degraded land and invasive species shall be identified in this section of the BMP. One of the aims of the BMP should be to restore degraded areas as part of the restoration actions (section 3).



3. Actions

An essential element of the defined actions to manage, restore and enhance ecosystem will be consideration of the appropriate grazing management in each area of the Farm, taking into account the relevant land class of each pasture, the presence of native vegetation and Natural Ecosystems.

3.1.1 Conservation Actions

Specify conservation measures for each of the natural ecosystems and important species on the Farm. Cross reference with the Farm Map.

Habitat / Species	Map Reference / Location	Action Required	Frequency	Date for completion	Person responsible

3.1.2 Restoration Measures

Specify restoration measures for each of the natural ecosystems and important species on the Farm. Include measures to avoid the spread of manage alien invasive species of flora or fauna and eradicate them from natural ecosystems. Also specify measures to restore degraded areas of the Farm

Habitat / Species	Map Reference / Location	Action Required	Frequency	Date for completion	Person responsible



3.1.3 Enhancement measures

Specify enhancement measures for each of the natural ecosystems and important species on the Farm.

Habitat / Species	Map Reference / Location	Action Required	Frequency	Date for completion	Person responsible



4. Monitoring

It is important to monitor of the extent and condition of the areas important for biodiversity each year to inform the review of the actions specified above, to ensure that the desired outcomes are being attained. The management actions should be adapted in light of the monitoring results. The Table in Section 1.5 should be used as a baseline for annual monitoring of natural ecosystems. The extent of alien invasive plant species and degraded land should also be monitored. The results of the actions Further guidance is provided the RAS Monitoring Point Guidance document.

4.1 Review

The BMP should be reviewed annually and updated at least every five years

	Date of next review	Completed (Y/N)
Annual Review – 1		
Annual Review -2		
Annual Review – 3		
Annual Review – 4		
Five-year Update		



5. Sources of Advice

It is recommended that local biodiversity experts are consulted for advice on the relevant biodiversity values to include in the BMP, as well as to provide suggestions on measures to protect, restore and enhance areas important for biodiversity. Record a summary of the advice received. If the local expert provided a separate report, this may be referenced here.

Advice Required	Organization	Date



LM3. Fertilizers



Desired outcome: Farmers use the minimum amount of inputs to meet the nutritional needs of their land to maintain their carrying capacity.

Number	Requirement	Level
LM3.1	There shall be a fertilizer management strategy that is reviewed annually.	Ma
	<p>LM3.1.1 The strategy shall include calculations of likely crop requirements, taking account of available nutrients in soil, organic manures, composts, and crop residues is in place and be based on the principles of efficiency and reduction of use.</p> <p><i>If fertilizers are used, the requirements are applicable irrespective of land class.</i></p>	Mi
LM3.2	The farmer shall test and record soil nutrient levels, at intervals relevant to maintaining a healthy vibrant soil.	Mi
LM3.3	Fertilizers applied shall be appropriate and as specific to the situation as possible with minimal side effects.	Mi
	LM3.3.1 Manures and fertilizers that can have a negative effect on soil microbial life and/or which contain heavy metals shall not be used.	Mi
	LM3.3.2 Fertilizers and manures shall only be applied to the intended crop area, specifically avoiding water bodies, riparian zones, and natural ecosystems.	Mi
LM3.4	Application methods and equipment that minimize waste and pollution shall be adopted.	Mi
	LM3.4.1 Application equipment shall be kept in good working order, cleaned after use, and regularly calibrated.	Mi



Number	Requirement	Level
	Waste and pollution have the potential to leach into the soil, creating many problems. Prevention methods include soil testing, yield mapping, pasture composition assessment, calibration of equipment, cleaning equipment, use of catch crops at the edge of the field, and not applying fertilizers prior to expected rainfall.	



LM4. Pesticides



Desired outcome: Farmers use the minimum amount of pesticides to achieve adequate control of pest burden on their farm.

LM4 applies to land classes 1-3 (parasite control on animals is addressed in AW3.4-3.5)

Number	Requirement	Level
LM4.1	There shall be an Integrated Pest Management (IPM) plan or strategy that is reviewed annually.	Ma
	LM4.1.1 The IPM plan or strategy shall be based on the principles of prevention, observation, monitoring and intervention. The plan shall include the recommended thresholds or triggers to use pesticides where these are available.	Mi
LM4.2	Farmers shall have a monitoring program for crop and pasture.	Mi
	LM4.2.1 Decisions to use pesticides shall be based on monitoring and thresholds.	Mi
LM4.3	Biological, physical and cultural control methods shall be used instead of chemical methods if they provide satisfactory control.	Mi
LM4.4	Pesticides applied shall be appropriate and as specific to the situation as possible with minimal side effects.	Mi
	LM4.4.1 Farmers shall apply pesticides in appropriate weather conditions, according to the directions on the label and/or manufacturers' directions, with appropriate and well-maintained equipment.	Mi
	LM4.4.2 Pesticides shall only be applied to the intended crop area, specifically avoiding water bodies, riparian zones and natural ecosystems.	Mi
LM4.5	Farmers shall use the minimum amount of pesticides to achieve adequate control of pest burden on their farm.	Mi



Number	Requirement	Level
	LM4.5.1 Prophylactic use of pesticides is prohibited.	Mi
LM4.6	Measures shall be in place the limit the impact of pesticide use.	Mi
	LM4.6.1 Farmers shall take care to avoid damage to beneficial organisms.	Mi
	LM4.6.2 Risks from pesticide application for human and animal health or the environment shall be minimized.	Mi
	LM4.6.3 Systems shall be in place to ensure that pesticides reach all targeted areas and to minimize losses to non-target areas or the atmosphere.	Mi
	<div style="display: flex; align-items: center;"> <p>Good practice guidance for handling of chemicals</p> <ul style="list-style-type: none"> • Chemicals need to be handled, stored and used in a responsible manner as prescribed by the occupational health and safety legislation and the latest regulations supporting this legislation. • The store should be located above the 50-year flood line • Only authorized and trained personnel shall have access to keys and the store • Person responsible for managing pesticide store (literate farmer/ farm worker) must be trained in pesticide handling & understand implications of incorrect handling • Only plant protection and/or animal health products are allowed in the store – no feedstuffs • Large containers should not be stored directly on cement floor – place on wooden pallets covered with thick plastic or on plastic pallets • Products in solid, powder or granular form must be stored above liquid formulations (less damage during accidental leakage) • All products must be stored in original containers with labels intact </div>	
LM4.7	Actions shall be taken to avoid pesticide resistance.	Mi



Number	Requirement	Level
LM4.8	Application records shall be kept for all pesticides that have been used.	Mi
LM4.9	Farmers shall dispose of used pesticide containers safely, or through a collection and recycling program.	Mi
LM4.9.1	Disposal of pesticides in rivers, streams, drains or other surface or ground waters is prohibited.	Mi







Section D – Social Welfare Criteria

Small scale farmers with no employed staff where the farm work is mostly done by the farmer, family members or the community only need to demonstrate compliance with SW2. Child Labor, SW6. Communities SW7. Health and Safety

SW1. Hiring Practices



Desired outcome: The farmer demonstrates good practices with regard to fair hiring, which is free of discrimination and intimidation and directly combats risk factors for forced labor.

Number	Requirement	Level
SW1.1	The farm shall have policies and codes of conduct to ensure fair hiring.	Ma
	SW1.1.1 Policies, codes of conduct, and information on grievance mechanisms shall be made available to workers upon hiring.	Mi
	SW1.1.2 There should be procedures in place to record, track and document, all post-arrival legal requirements for migrant workers.	R
	<i>Coming soon: Example Hiring policies and codes of conduct</i>	
SW1.2	The farm shall not engage in or support the use of forced or compulsory labor, including prison labor, as defined in ILO Convention 29.	Ma
	ILO Convention 29: https://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:C029	
SW1.3	The farm shall operate in accordance with local laws and not engage in hiring practices that increase risk of forced labor and other human rights abuses.	Ma
	SW1.3.1 The farm shall not engage in hiring practices which increase the risk of forced labor including, but not limited to, charging fees for	Ma



recruitment to workers; requiring that workers lodge deposits or security payments; withholding passports, other personal documentation, wages or benefits; charging for document processing fees; or engaging in intimidation or coercion.

SW1.4

The farm shall orient all employees to the terms of their contract and provide them contracts in their native language, or a language that is understood by both parties.

Mi

SW1.4.1 The farm shall maintain a copy of worker contracts in writing and provide workers timely access to these at their request.

Mi



SW2. Child Labor



Desired outcome: Children are protected from exploitation, not engaged in dangerous work, and able to participate fully in formal education. Children are able to safely learn farming from their family members by engaging in age-appropriate activities outside of school hours and lessons.

Number	Requirement	Level
SW2.1	The farm shall not employ workers under the age of 15 or legal minimum (whichever is higher).	Ma
SW2.1.1	Workers under the age of 18 shall not be engaged in the worst forms of child labor or hazardous child labor, as defined in ILO Convention No. 182 and Recommendation No. 190.	Ma



ILO Convention N.182

Article 3

For the purposes of this Convention, the term **the worst forms of child labor** comprise of:

- a. all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labor, including forced or compulsory recruitment of children for use in armed conflict.
- b. the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances.
- c. the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties.
- d. work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C182

Recommendation No. 190.

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R190



Number	Requirement	Level
SW2.2	Farmers may engage their own children in work provided that children shall not be engaged in the worst forms of child labor or hazardous child labor, as defined by the ILO. Work shall not interfere with schooling.	Ma



SW3. Working Conditions and Conduct






Desired outcome: Workers work in a respectful environment, free from all forms of discrimination, harassment and abuse. Workers are enabled to speak out and have their concerns addressed in a clear, timely, and courteous manner.

Small scale farmers with no employed staff where the farm work is mostly done by the farmer, family members or the community only need to demonstrate compliance with SW2. Child Labor, SW6. Communities SW7. Health and Safety

Number	Requirement	Level
SW3.1	Discrimination, as defined in ILO Convention No. 111, is prohibited.	Ma
	SW3.1.1 Discrimination by employers in hiring, compensation, treatment or daily activities of any kind is prohibited.	Ma
	SW3.1.2 Non-discrimination codes of conduct shall be shared with all employees. Employees shall be aware of their rights.	R
	ILO Convention No. 111:	
	1. For the purpose of this Convention the term discrimination includes--	
	a. any distinction, exclusion or preference made on the basis of race, color, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation.	
	b. such other distinction, exclusion or preference which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation as may be determined by the Member concerned after consultation with representative employers' and workers' organizations, where such exist, and with other appropriate bodies.	
	2. Any distinction, exclusion or preference in respect of a particular job based on the inherent requirements thereof shall not be deemed to be discrimination.	



Number	Requirement	Level
	<p>3. For the purpose of this Convention the terms employment and occupation include access to vocational training, access to employment and to particular occupations, and terms and conditions of employment.</p> <p>https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312256</p>	
	 <p><i>Coming soon: Example code of conduct</i></p>	
SW3.2	<p>Harassment, verbal abuse or physical abuse of any kind at any time is prohibited.</p>	Ma
	 <p>This includes use of verbal or physical abuse, mental or physical coercion, or any other form of harassment including sexual harassment.</p>	
	<p>SW3.2.1 Codes of conduct prohibiting harassment and abuse shall be shared with all employees. Employees should be aware of their rights.</p>	R
	 <p>This includes use of verbal or physical abuse, mental or physical coercion, or any other form of harassment including sexual harassment.</p>	
SW3.3	<p>Corruption, extortion and/or bribery of workers or families are prohibited.</p>	Ma



SW4. Freedom of Association and Collective Bargaining



Desired outcome: All workers are free to organize and collectively bargain without interference or penalty from farm management.

Small scale farmers with no employed staff where the farm work is mostly done by the farmer, family members or the community only need to demonstrate compliance with SW2. Child Labor, SW6. Communities SW7. Health and Safety

Number	Requirement	Level
SW4.1	The farm shall operate in accordance with local legislation related to freedom of association and collective bargaining.	Mi
	SW4.1.1 Farmers should not discriminate, punish, or penalize in any way workers who choose to organize or collectively bargain.	R



SW5. Wages and Benefits



Desired outcome: Workers receive payment in a transparent and consistent manner that is non-discriminatory and provides for appropriate rest and leave for the worker.

Small scale farmers with no employed staff where the farm work is mostly done by the farmer, family members or the community only need to demonstrate compliance with SW2. Child Labor, SW6. Communities SW7. Health and Safety

Number	Requirement	Level
SW5.1	Workers shall receive wages that comply with local legal minimum wages or collectively bargained wages, whichever is higher.	Mi
	SW5.1.1 Farmers shall not use consecutive short-term contracts and/or false apprenticeship or other schemes to avoid meeting obligations to personnel under applicable labor laws and regulations.	Mi
	SW5.1.2 Farmers shall pay all wages in legal tender and provide benefits due in a manner convenient to workers, without delay or substitutions e.g. vouchers, coupons, or promissory notes.	Mi
SW5.2	Equal pay for equal work should be provided for all workers regardless of gender, work status, religion, political affiliation, nationality, or other factors.	R
SW5.3	Farmers should provide paid vacation leave for workers and should document said paid leave agreements in employment contracts.	R
SW5.4	In-kind benefits (e.g. meals, housing, etc.) may be provided as a portion of wages in compliance with local laws and regulations.	Mi



SW6. Communities




Desired outcome: Farm activities respect the rights of and have minimal negative impact on communities.

Number	Requirement	Level
SW6.1	Farms shall acknowledge and adhere to legal rights of communities regarding sites, land and other resources.	Mi
	SW6.1.1 Farms shall respect the customary rights and religious and cultural significance to communities of locations and resources.	Mi
	<p>United Nations Declaration on the Rights of Indigenous Peoples (A/RES/61/295) https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf</p>	
SW6.2	Free Prior and Informed Consent (FPIC) should be obtained for any activity that may affect the lands, territories and resources that Indigenous Peoples customarily own, occupy or otherwise use.	R
	<p>Free, Prior and Informed Consent (FPIC) is a specific right that pertains to indigenous peoples and is recognized in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). It allows them to give or withhold consent to a project that may affect them or their territories. Once they have given their consent, they may withdraw it at any stage. Furthermore, FPIC enables them to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated. This is also embedded within the universal right to self-determination. http://www.fao.org/indigenous-peoples/our-pillars/fpic/en/</p>	
SW6.3	Farms should engage local communities on farm management decisions that risk adversely affecting communities and should engage them on issues which create community concern.	R

SW7. Health and Safety



Desired outcome: Workers work in facilities and environments that are safe and healthy.

Number	Requirement	Level
SW7.1	Infrastructure shall be inspected regularly to ensure the safety of buildings.	Ma
	SW7.1.1 Fire risk assessment shall be conducted and steps taken to address risks.	Mi
SW7.2	Access to clean and potable water shall be provided at the main farm site.	Ma
	SW7.2.1 If risks have been identified, regular testing of water sources should be conducted.	R
SW7.3	Facilities for proper hygiene and comfort, including hand-washing facilities, toilets, and a place to store food shall be available at the main farm site.	Mi
SW7.4	Potentially hazardous work situations shall be clearly identified and unnecessary risks eliminated.	Ma
	SW7.4.1 Farmers shall conduct and document a risk assessment of potential health and safety risks and hazards, which is updated on a regular schedule or when new equipment or conditions are introduced and accompanied by preventative and corrective actions to address said risks.	Mi
	SW7.4.2 Clear signage shall exist to identify areas or equipment that are potentially hazardous.	Mi
	There are many resources available to help with the identification and management of risks. See for example: https://www.safework.sa.gov.au/industry/agriculture/farmers-guidebook-to-work-health-and-safety	



Number	Requirement	Level
SW7.5	Machines shall have clear instructions on safe usage, are maintained to limit hazards, and dangerous parts are guarded or encased.	Ma
SW7.6	For hazards that can be minimized through the use of personal protective equipment (PPE), the organization should provide workers with appropriate PPE at no cost to the worker.	R





Section E – Farm and Communal Farmer Group Certification

E1. Communal Farmer Group Requirements

Communal Farmer Groups are one of the three certification types by which farms may be certified to the RAF standards.

Farmers and herders may be eligible for participation in Communal Farmer Group certification if the following criteria are met:

- The farmer faces significant economic constraints, such as lack of capital assets and low access to finance (i.e. lack of economies of scale);
- The farmer faces significant information constraints, including lack of technical knowledge and low access to market information;

The farm/farmer also meets at least two of the following criteria:

- The farmer has little or no land security,
- The farm is independent and not affiliated with a company for which they produce fiber,
- The farm has a small number of livestock,
- The farm relies on family labor,
- Animal fibers are the farmer's primary source of income,
- The farm uses relatively low levels of agricultural inputs and has comparatively low yields relative to the range of yields for the given commodity and context, and
- The farm has a relatively small land footprint.

The need for an adapted approach for Communal Farmer Groups was identified for wool, mohair and alpaca. Although individually the amount of fiber produced by each farmer will be a tiny percentage of a country or region's production, collectively Communal Farmer Groups may produce the majority of fiber in some regions. Communal Farmer Groups that are unable to meet the specified conformity timelines may apply for an extension via the certification body.

The desired outcome is not to create a different standard or threshold but to identify alternative approaches of verifying outcomes. In this approach, farm groups that meet the eligibility criteria can demonstrate compliance with the standard documentation requirements at the group level and the sample farm audits are based on animal based assessments. The templates below have been adapted to meet the needs of Communal Farmer Groups and to be completed at the group level.

These templates should be completed taking account of the practices of all the members of the group.



E1. Communal Farmer Group Requirements: Guidance Notes and Templates



Templates

- [Herd Health and Welfare Plan for Communal Farmer Groups](#)
- [Land Management, Soil Health and Biodiversity Plan For Communal Farmer Groups](#)



Herd Health and Welfare Plan

For Communal Farmer Groups.

Group Name:

Location:

Date:

Completion of this template meets the requirements of AW3.2



Introduction:

This template is designed to assist Communal Farmer Groups develop the animal health and welfare plan that is required for Responsible Animal Fiber certification requirement **AW3.2**. This template is designed to be used for any certified species (sheep, goats or alpacas). Unless otherwise stated, all sections of the template apply to all species. Topics that are species specific, such as tail docking for sheep, are highlighted as such.

The complexity of an animal health and welfare plan will differ depending on several different factors:

- The number of farmers within the group
- The average number of animals in each herd or flock
- The degree of variation of animal management practices by farmers within the group
- The prevalence of risks to animal health and welfare within the group

All animal health and welfare plans shall be:

- Representative of the requirements of individual herds or flocks within the group.
- Developed with the engagement of the communal farmers within the group (for example through workshops or similar group meetings)
- Developed with appropriate veterinary or technical advice
- Regularly reviewed and updated

The use of this template is not compulsory but it may be used to provide a basic structure if there is not already a plan in place.



Overview

Date of Plan	
Group name	
Group contact person name	
Group contact person address	
Number of farmers in group	
Species to be certified	
Veterinary or technical support to develop this plan (name and qualification)	

Plan completed by	Name:	Signature:
	Position:	Date:
Date plan due for review		



1. HERD OR FLOCK DETAILS

1.1 Herd or Flock details:

Breed(s) or type(s) of animal	
Range of total number of animals in each herd or flock within the group	
Average number of breeding females in each herd or flock	
Average number of breeding males in each herd or flock	
Expected range of annual birthing %* in each herd or flock within the group	
Expected average annual birthing %* within the group	

*Birthing percentage is calculated as follows: (number of offspring born alive/number of females bred) X 100

1.2 Describe the herd or flock inspection schedule: who inspects the herds or flocks, and how often.

	Months when this is applicable to animals	Frequency of inspection (e.g. once daily, weekly etc.)	Person responsible (e.g. farmer, farmer's family, hired staff)
On pasture			
Off pasture in pens or housing			



2. DISEASE PREVENTION, MANAGEMENT AND TREATMENT

2.1 Key health challenges, planned prevention and vaccination programs.

Health challenge	Type of animal affected	Action	Timing
<i>e.g. pneumonia, lameness, internal parasites etc.</i>	<i>e.g. all, or only freshly weaned young animals</i>	<i>e.g. vaccination program or antibiotic treatment</i>	<i>e.g. as needed or vaccinate 6 weeks prior to birthing</i>

Expected health challenges for sheep and goats could include:

- Lameness/foot problems
- Fly strike
- Internal parasites
- Facial eczema

Expected health challenges for alpacas could include:

- Lameness/foot problems
- Pneumonia
- Coccidiosis
- Mange
- Internal parasites



3. ANIMAL HUSBANDRY PROCEDURES

3.1 Castration

If castration is carried out, describe the approach including details of rationale, method, age and pain relief. If pain relief is not provided provide a rationale for this.

Reason for castrating males	
Number or % of farms in the group castrating males	
Method(s) used	
Age/ age range	
Pain relief measures	
Reason if pain relief is not used	

3.2 Tail docking [SHEEP ONLY]

If tail docking is carried out, provide a description of the approach including rationale, details of method, age, pain relief. If pain relief is not provided provide a rationale for this.

Reason for tail docking lambs	
Number or % of farms in the group tail docking	
Method(s) used	
Age/age range	



Pain relief measures	
Reason if pain relief is not used	



4. BREEDING MANAGEMENT AND BIRTHING

4.1 Breeding management

What are the main qualities that farmers in the group select for in their breeding strategy? Example: conformation, fiber quality, birth rates, meat quality etc.

e.g. we select for good leg/foot health and high fiber quality.

4.2 Breeding procedures

a. Do any farmers in the group use laparoscopic artificial insemination? If yes, please indicate why this is used, who carries out the procedure, and provide details of pain relief.

e.g. Only 5% of the group uses this technique. In those flocks the top 5-10% of the flock are annually bred using laparoscopic AI to introduce superior fiber traits. The vet carries out the procedure. Breeding females are sedated with ACP and given ketoprofen as an analgesic. Antiseptic spray is applied following the procedure and animals are monitored carefully.

b. Do any farmers in the group use electroejaculation? If yes, please indicate why this is carried out, who carries out the procedure, and provide details of pain relief.

e.g. two farmers in the group have a stud breeding operation and the vet carries out electroejaculation for fertility testing for all stud males.



4.3 Birthing

Detail the plans for birthing including time of year and other factor to reduce mortality of females and newborns

e.g. for all farmers in the group birthing is planned for the spring, when the weather is warmer and there is good grass growth to support the lactating females. Young females give birth for the first time when they are two years old.

5. BIOSECURITY MEASURES

Biosecurity

Document the actions undertaken to manage or reduce the risk of disease from the following sources, and any others you have identified. If any of the sources below are not applicable to your group please note this and the reason – e.g. “no famers in the group have buildings”.

Potential sources of disease	Control Actions Taken
Incoming livestock	<i>e.g. Only purchase from herds or flocks with known health status. Put incoming stock in quarantine pen with no contact with existing herd or flock for 28 days. Monitor for signs of disease</i>
Wild animals	<i>e.g. try to minimize contact with animals that carry transmissible diseases and/or parasites.</i>



People	<i>e.g. no visitors without prior appointment and record kept of visitors.</i>
Buildings	<i>e.g. disinfectant foot dips outside each building</i>
Equipment	<i>e.g. foot trimming equipment cleaned and disinfected after use. Shearers ensure sanitized clippers brought onto farm</i>
Other (please describe)	<i>e.g. animals not mixed with other herds or flocks to minimize disease transmission risk</i>

6. HEALTH ISSUE REVIEW AND ACTION PLAN

The table below may be used to summarize the issues that have occurred through the year, treatments given, and any deaths/culls that may be attributable to a specific health problem. Carrying out this review will help identify whether certain health issues are increasing or decreasing from year to year.

Condition	No. or % of farmers in the group that had this problem	Total no. animals treated	Average % Mortality			Comments
			Died	Euthanized	Culled	
Lameness						
Metabolic disease (e.g. hypocalcemia)						



Condition	No. or % of farmers in the group that had this problem	Total no. animals treated	Average % Mortality			Comments
			Died	Euthanized	Culled	
Clostridial disease						
Infectious disease (e.g. pneumonia)						
Facial eczema						
Parasites	Scab/mange					
	Flystrike					
	Fluke					
	Worms					
Breeding female specific	Abortion					
	Prolapse					
	Difficulty birthing					
	Barren					

Mastitis					
Other					



Young animals	Congenital defect					
	Starvation/ Exposure					
	Joint ill					
	Other					
Other						
Other						
Unknown						



ACTION PLAN

Review records and collated data and identify key issues within the group to address and actions to take. For example, the health problems that are most common within the group and/or those that cause the most mortality.

Issue	Brief description	Actions already taken	Actions to be taken
1			
2			
3			
4			
5			
Comment			



Land Management, Soil Health and Biodiversity Plan

For Communal Farmer Groups.

Group Name:

Location:

Date:

Completion of this template meets the requirements of LM1.1.1,
LM2.1, LM2.4, LM2.6, LM3 and LM4



Introduction:

This template is designed to assist Communal Farmer Groups develop the land management and soil health plan that is required for Responsible Animal Fiber certification requirement **LM1.1.1** and the biodiversity plan requirement **LM2.1**. It also covers the information required for **LM2.4** and **LM2.6** (and the associated sub-standards) and sections **LM3** and **LM4**. This template is designed to be used for any certified species (sheep, goats or alpacas). Unless otherwise stated, all sections of the template apply to all groups in all regions and landscapes.

The complexity of the land management, soil health and biodiversity plan will differ depending on several different factors:

- The number of farmers within the group
- The average land area utilized by each farmer and the total land area where animals managed by members of the group may graze
- The degree of variation of land management practices by farmers within the group, for example whether land is cultivated and planted with crops that are grazed by or harvested for certified animals
- The prevalence of risks to pasture and soil health (e.g. erosion, compaction, overgrazing) within the group
- The prevalence of wildlife species in the area

All land management, soil health and biodiversity plans shall be:

- Reflective of the different land, vegetation and biodiversity on land managed by the group
- Representative of management practices within the group
- Developed with the engagement of the communal farmers within the group (for example through workshops or similar group meetings)
- Developed with appropriate technical advice
- Regularly reviewed and updated

The use of this template is not compulsory but it may be used to provide a basic structure if there is not already a plan in place.



Overview

Date of Plan	
Group name	
Group contact person name	
Group contact person address	
Number of farmers in group	
Species to be certified	
Technical support provided to develop this plan (name and qualification)	

Plan completed by	Name:	Signature:
	Position:	Date:
Date plan due for review		



1. Communal Farmer Group Map

There must be a map or maps that cover the extent of the land utilized by the Communal Farmer Group and key locations within that area as listed below.

Maps may be sketch maps, annotated printed maps of the region or annotated satellite mapping. It is understood that communal grazing areas may not have fixed boundaries, but the map should detail the general area where grazing is planned to take place through the year.

Important areas to identify on the map (where applicable):

- Extent of land used by the entire group of communal farmers
- Villages or other settlements
- All types of natural water body: lakes, ponds, springs, rivers and streams, whether permanent or seasonal.
- Other wetlands, where soils are waterlogged for most of the year (e.g. swamps and bogs), or land which is periodically flooded (e.g. flood plains).
- Areas of regular sighting of predator species
- Migratory corridors for wildlife
- Natural ecosystems such as grasslands comprising predominantly of native plant species (see below for more details)
- Areas which have been managed/improved by the introduction of new seeds or plants
- Areas used for conserving hay or other forages
- Areas used for growing crops
- Land designated or regulated as Protected Areas or Key Biodiversity Areas (see below for more details)
- Areas that are important for biodiversity where grazing must be restricted either year round or at certain times of year when it could have a negative impact on natural ecosystems, native vegetation or on wildlife species
- Areas of degraded land
- Areas where invasive alien species are found

Definition of natural ecosystems

Natural ecosystems are defined as ecosystems that substantially resembles one that is or would be found in a given area in the absence of major human impacts. This includes human-managed ecosystems where much of the natural species composition, structure, and ecological function are still present. This can include ecosystems that might have been subject to major impacts in the past (for instance by agricultural cultivation), but where it has re-attained a natural species composition, structure and ecological function. It can also include managed natural ecosystems where much of the ecosystem's composition, structure, and ecological function are present; such as managed native grasslands or rangelands that are, or have historically been, grazed by livestock. Natural ecosystems may be partially degraded by anthropogenic or natural causes (e.g., harvesting, fire, climate change, invasive species), but have not been converted to another land use.



Natural Ecosystem	Extent (note unit of measurement)	Vegetation coverage (%)	Native species coverage (%)
<i>[E.g. native grasslands]</i>	<i>[E.g. 250ha = 90% of all land covered by communal group]</i>	<i>[E.g. 90%]</i>	<i>[E.g. 100% - all species in this area are native]</i>

1.1 Details of protected areas or key biodiversity areas

Protected Areas (PA) and Key Biodiversity Areas (KBAs) contribute significantly to the global persistence of biodiversity. It is important that Communal Farmer Groups are aware if they are operating in an PA or KBA and that they do not negatively impact these sites. A PA is a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives. They can include the following: Nature Reserves; Wilderness Areas; National Parks; Natural Monuments; Habitat Management Areas; Protected Landscapes; and Protected areas with sustainable use of natural resources.

The group manager must check online (see links below) to see whether the land managed by the Communal Farmer Group includes Protected Area or Key Biodiversity Areas, and identify the biodiversity values for which each site has been designated.

Protected Areas are shown on the following web portal: <https://www.protectedplanet.net/>. World Database of Key Biodiversity Areas provides details of Key Biodiversity Areas at the following website: <http://www.keybiodiversityareas.org>.

If there are no protected areas or key biodiversity areas on land managed by the Communal Farmer Group the following table is not applicable.



Name of protected area or key biodiversity area	Description/key biodiversity values leading to designation

1.2 Details of important Species on the Communal Farmer Group’s land

This section includes all species of wildlife whether they interact with livestock or not. See also section 1.3 for specific questions relating to livestock/wildlife conflict. These are listed in the first column of the table below.

The farmers in the group will provide information on the species of wildlife they see or know to be present on the land that they manage.

The group manager must check these species on the IUCN red list [see <https://www.iucnredlist.org/>] and review the habitat and ecology information on this website to complete the second and third columns of this table below.

Species name	Species Category (Protected, threatened, endemic, keystone species)	Ecosystems that are important for the species



Definitions:

- Protected species are any species that are protected from harm under legislation in the country in which the Communal Farmer Group is located.
- Threatened species include any species categorized as Critically Endangered, Endangered or Vulnerable by the IUCN Red List of Threatened Species: <https://www.iucnredlist.org/>.
- An endemic species is any species whose global range is restricted to a limited geographical area (either a country or less than 50,000 km²)
- Keystone species are species whose influence on ecosystem function and diversity are disproportionate to their numerical abundance. These can include large mammalian predators, large herbivores, or key pollinators and seed dispersers.

1.3 Reducing livestock-wildlife conflict

<p>List the species known to be present on land managed by the Communal Farmer Group which can cause livestock-wildlife conflict. Include species that are only present seasonally</p>	<p><i>[Examples could include predators that are known to try to injure or kill livestock and wild grazing species that share the land with livestock]</i></p>
--	--

<p>List the non-lethal management practices used to reduce the risk of livestock-wildlife conflict</p>	<p><i>[Examples could include using guardian animals to protect livestock; using barriers/deterrents such as lights, noise, flagging on fencing etc.; and making frequent and unpredictable patrols of pasture areas to deter wildlife from approaching livestock]</i></p>
--	--



<p>If lethal control of wildlife is used, detail the circumstances under which it would occur</p>	<p><i>[Examples could include an active attack on livestock by a predator]</i></p>
<p>If lethal control of wildlife takes place, what methods are used, and how is the specific individual animal that is causing the problem targeted?</p>	<p><i>[Note poison, snares and leg-hold traps are prohibited under all Responsible Fiber standards]</i></p>
<p>If lethal control of wildlife takes place, how many animals of which species have been controlled in the previous 12 months?</p>	

2. Communal Farmer Group Land Details

For all question relating to area of land the unit of measurement must be noted in the response (e.g. hectare, acre or other local measurement)

<p>Area of land utilized by Communal Farmer Group</p>	
<p>Soil type or types</p>	



Crops grown (if any)	
Area of land used for growing crops each year (if any)	
Area of land used for growing/harvesting hay or other forages each year (if any)	
Species used if planting or reseeding forage or grazing crops is carried out	

3. Communal Farmer Group Grazing Management

Total number of animals grazing at any one time	
Average stocking rate across total grazing area	
Describe grazing management practice(s)	<i>[For example moving animals to fresh pastures daily or weekly and not returning to grazed areas for at least x days or weeks. set stocking with x number of animals on y area for z number of days or weeks]</i>
Main plant species (native or introduced) present in grazing areas	

4. Communal Farmer Group Soil Health and Land Degradation



For further information on mitigation strategies see Annex to this plan

Problem encountered	Where found and extent <i>[E.g. mark on map in section 1.1, or state situation where it may arise – e.g. cropping land, winter grazing areas]</i>	Mitigation Strategies
Erosion		<i>[Examples could include: if in cropping areas use reduced tillage, cover crops or adding organic matter; in grazing situations reduce stocking density or herd animals away from affected areas]</i>
Compaction		<i>[Examples could include: aerating soil, moving feed/feeders/mineral buckets to avoid creating focal points, avoiding traffic with machinery]</i>
Low soil organic matter		<i>[Examples could include: adding manures, on cropping land planting green manures that are then incorporated into the soil, managing grazing patterns so livestock naturally deposit manures in certain areas]</i>
Overgrazing		<i>[Examples could include: removal of stock, herding to keep stock away from the area, reseeding, reduction in total stock numbers managed by the group]</i>



--	--	--

Invasive alien species [list species found if any]		<i>[Examples could include: physical removal of plants, use of herbicides, re-seeding pasture areas]</i>
Other (please specify)		

5. Communal Farmer Group Conservation Actions

Specify conservation measures for each of the natural ecosystems and important species identified on land managed by the Communal Farmer Group. Cross reference with the map required by 1.1. above. Depending on the condition of the natural ecosystem and/or status of the important species, actions may be part of ongoing management, or working towards restoration or enhancement.

Habitat/ species	Map ref/ Location	Action required (note also whether this is management, restoration or enhancement)	Frequency of action	Date for completion	Person responsible
<i>[E.g. natural grassland]</i>	<i>[E.g. location no. 3]</i>	<i>[Stocking density reduced by 20% to aid recovery of vegetation]</i>	<i>[Grazing season this year]</i>	<i>[End of grazing season this year]</i>	<i>[Farmers from Village A]</i>



6 Communal Farmer Group Fertilizer Usage

Are any fertilizers (natural or synthetic) applied to the land? If no move to next section	
If yes please list the materials	<i>[Examples could include livestock manures, lime, compost, rock phosphate potassium sulphate, calcium ammonium nitrate, ammonium sulphate etc.]</i>
If yes, how are decisions made about which fertilizer to use and at what rate of application?	<i>[Examples could include: soil testing, nutrient balance calculations]</i>



If yes, how are pollution risks minimized when fertilizers are applied	<i>[Examples could include identification of areas and times of year when fertilizers are not spread, and accurate application using calibrated equipment]</i>



7 Communal Farmer Group Pesticide Usage

<p>Are any pesticides applied to the land? If no move to next section</p>	
<p>If yes please list the type of pesticide and the active ingredient</p>	<p><i>[Examples could include: herbicides such as glyphosate, fungicides such as imidazoles, insecticides such as pyrethroids etc.]</i></p>
<p>If yes, what techniques are used to try to avoid the use of pesticides?</p>	<p><i>[Examples could include: crop rotation, selection of varieties that are resistant to prevalent disease problems, cultivation techniques such as direct drilling, encouraging beneficial organisms etc.]</i></p>
<p>If yes, how are decisions made about which pesticide to use and when?</p>	<p><i>[Examples could include monitoring programs with thresholds such as number of pest insects found per plant, extent of fungus on crop plants etc.]</i></p>
<p>If yes, how are pollution risks minimized when pesticides are applied</p>	<p><i>[Examples could include identification of areas where pesticides are not spread, only spraying when there will not be drift into non-target areas]</i></p>



If yes, note who is responsible for pesticide management (storage, correct utilization and disposal of packaging and other waste)	

8 Communal Farmer Group Hazardous Materials

Are any hazardous materials applied to the land? If no move to next section	
If yes please list the materials	<i>[Examples could include: Animal health products (medicines, sharps, etc.), Chemicals (fertilizers, pesticides, cleaning agents, antifreeze, etc.), Certain building materials (asbestos, contaminated concrete, etc.), Batteries, Equipment containing refrigerants (freezers, air conditioners, etc.), Lubricating oils or filters, Paints or coatings, Machinery tires, Pressurized containers]</i>
If hazardous materials are applied to the land how is human and animal health and water and soil quality protected?	<i>[Examples could include: designated areas away from watercourses that cannot be accessed by livestock or wildlife, burial of waste]</i>



--	--

9 Communal Farmer Group Monitoring Point Guidance

Monitoring, ideally on a long-term basis, is important to detect changes and gain objective information on the progress towards sustainable management on the land. The minimum requirements for Communal Farmer Groups are to have a formal monitoring plan and some monitoring sites.

Different Communal Farmer Groups have different arrangements when it comes to land. The table below shows examples of different types of access to land and the expectation for monitoring for each. Some groups may have more than one type of arrangement for land use, and they should follow the monitoring guidance for each.



Arrangement for use of land by the group	Expectation for monitoring
Broadly the same land area is available to group members from year to year.	Monitoring points will be established. See section 9a below.
Land available varies from year to year. Group members have no management control over land and do not know from year to year where they will graze their stock	Pre- and post-grazing monitoring by photograph. See section 9b below.
Formal agreement or licence to graze which defines the area, the length of time grazing takes place and the stocking density An example would be a licence to graze forest land issued by government permission in India	Pre- and post-grazing monitoring by photograph. See section 9b below.

9a. Monitoring point systems

A monitoring system means setting a number of specific locations on the land managed by the Communal Farmer Group to be regularly checked. Regularly recording observations for **pasture** and **vegetation** allows the group to observe changes over time.

A Monitoring Point System involves three key steps:

1. Select monitoring points.
2. Select monitoring method at each point.
3. Record information annually from each point.

Select Monitoring Points

Choose set points to monitor from. The same points will be used every year.

GPS coordinates may help identify the points. They may also be marked with a post. Locations for monitoring should be chosen to include:

Representative points: Should reflect the general situation of the land. These points should be chosen to truly represent the overall area of interest. You may choose to select a point to



represent each soil type or pasture type on the land managed by the group (e.g. high elevation, mid elevation, low elevation, or riparian zones).

Critical points: These points should be chosen based on the important changes that may be happening on the land managed by the group. For example, a patch where invasive species are taking over, or a fragile spot where there are active erosion processes.

Benchmark points: These points are selected as representative of the best state and trend of the site.

Select Monitoring Methods

Monitoring methods vary in complexity, time required, cost, and quality of information. We have included descriptions of photographic plots, transects, and cages.

Photographic plots

Photographs are regularly taken from a given point (e.g. a transect stake) in the same direction. The images may be used as a condition reference to estimate condition without completely repeating all measurements.

Photographic plots are cheap, easy to install and generate valuable information to track structural changes in soil and vegetation.

Transects

Transects is a specific line or length of land that transects the land and allows the collection of more detailed information, such as the percentage of each species on a site, the percentage of bare ground, or the number of plants utilized by the livestock.

This information provides information on the state of the vegetation and its long-term trend. The process is easily repeated to allow validation of recorded results.

Line Transects – A linear measurement of plant community and characteristics that can be used for site evaluation. Line transects usually involve randomly selecting a representative site and placing a marker. The evaluator randomly chooses a compass direction (the site and direction will be marked and recorded for repeatability) and a line, tape, or rope of 50 or 100 meters is



used to mark the line. Measurements of species occurrences, canopy, groundcover, and other factors can be recorded at predetermined increments along the line. This measurement process can be repeated each time by restringing the line and re-measuring the desired factors and elements.

Pace Transects – Similar to line transects but no line is necessary. A transect stake is established and a magnetic direction chosen by compass, just as with a line transect. The evaluator simply takes paces along the imaginary line direction and records the findings that occur at the point of his shoe or boot. This method should be conducted by the same evaluator each time – or by someone with a similar stride length and recording criteria – to maintain replication accuracy.

At least 30% of the monitoring points should be transects.

Cages

Cages are set up at one location for the duration of a season. The cage prevents the area from being foraged by animals. This allows observation of the growth rate of the site when undisturbed. New growth for the season can be accurately measured by comparing the inside of the cage with the outside. You can also observe how much the animals have eaten of the year's active growth. Cages may be used for multiple years to measure the cumulative effects of long term grazing in the area.

Other forms of monitoring may also be used.

Record information

If you have never used a monitoring point system, the information collected during the first year of the monitoring point system is very important to define the current status of the land. This information should be as extensive as possible.

In following years, information should be collected and recorded at the same time of the year at each monitoring point.

Monitor type Complexity Frequency Information obtained



Monitor Type	Complexity	Frequency	Information Obtained
Photographic plot	Minimal	Once per year	Visual comparisons (vegetation and pasture structure)
Transects	Medium	Once per year	<p>Vegetation</p> <ul style="list-style-type: none"> • coverage (type and number) • invasive species <p>Pasture</p> <ul style="list-style-type: none"> • soil tests • compaction • presence of soil organic matter
Cages	Medium	Once per year, change position each year	Vegetation amount of new growth per season forage rates

9b. Photographic monitoring

When farmers from the communal group are unable to carry out year-to-year monitoring as described in section 9a above, they must still provide some evidence of monitoring individual grazing sites to demonstrate good practice grazing management.

The simplest way to do this is for farmers to take photograph(s) of a grazing site at the time they move their animals onto the land and a second photograph or set of photographs taken in the same spot(s) and looking in the same direction when they move their animals on. The date that the photographs are taken must be recorded.

The number of sites and photographs taken by individual group members is determined by the group manager and should relate to the risks to soil health. For example, a farmer with less than 20 animals who moves them every day is lower risk than a farmer with 300 animals who will graze the same area of land for a number of weeks.

Photographs may be sent to the group manager who will collate them for review at audit.

Annex: Soil Management Practices to Reduce Soil Erosion

Reduced Tillage

Effect:

- leaves residue on the soil surface, effectively controlling erosion
- loosens less soil
- prevents soil from being moved down slope by tillage implements

Use against erosion caused by:

Other Benefits:

- improved water infiltration
- reduced organic matter loss
- improved soil structure



Adding organic materials

Effect:

- leaves residue on the soil surface, effectively controlling erosion
- loosens less soil
- prevents soil from being moved down slope by tillage implements

Use against erosion caused by:

Other Benefits:

- improved water infiltration
- reduced organic matter loss
- improved soil structure



Crop rotation

Effect:

- protects the soil by keeping the soil surface covered year round (grass and legume forage crops)
- helps hold soil in place with the extensive root systems (perennial crops)



- helps protect the soil from fall through to harvest (fall-planted annual crops such as winter wheat)

Other Benefits:

- improved soil structure and less soil compaction because of root systems
- improved water infiltration
- higher yields
- reduction in insect and disease build-up

Use against erosion caused by:



Cover crops

Effect:

- protect the soil by covering it when it might otherwise be left bare
- help improve soil structure to resist erosion and improve infiltration, less runoff due to added organic matter
- soil held in place by the roots

Other Benefits:

- increase organic matter levels
- help hold onto nutrients from recently applied manure
- provide forage
- weed and nematode suppression

Use against erosion caused by:






Appendix A – Slaughter Site (Optional)

This appendix applies to slaughter sites. RAS certification is optional for slaughter sites; RAS fiber may be sold from farms when the slaughter sites are not certified.


S1. Management and Training



Desired outcome: The slaughter process prevents or minimizes pain and distress. All animals are stunned (rendered unconscious and insensible to pain) prior to slaughter.


Number	Requirement	Level
S1.1	All personnel unloading, handling, stunning and slaughtering animals shall be trained and competent to carry out the tasks required of them, so as to protect animal welfare.	C
	<p>S1.1.1 Training shall include:</p> <ul style="list-style-type: none"> e. Animal welfare principles f. Good handling practices g. Identification of sick/injured animals h. Stunning methods and checking effectiveness of stunning i. Slaughter methods 	Ma
	 <p>Training should be relevant to the tasks undertaken. While many slaughter sites rotate personnel through different tasks and ensure that any worker may carry out any aspect of the slaughter process, others have specific teams who only stun or only work on unloading and the holding pens.</p>	
S1.2	There shall be a named person who is responsible for animal welfare and who has the authority to stop slaughter operations if there is a risk to alpaca welfare.	Ma



Number	Requirement	Level
S1.3	Documented standard operating procedures for all parts of the operation shall be developed and implemented.	Mi
	The Humane Slaughter Association have training resources and guides covering all aspects of animal slaughter. See https://www.hsa.org.uk/publications/online-guides	
S1.4	Records of training shall be kept.	Mi







S2. Casualty Animals

Number	Requirement	Level
S2.1	Animals that are down and unable to rise shall be euthanized promptly using a method defined by these standards.	Ma
	This includes animals that are discovered on the transport vehicle when they arrive at the slaughter site as well as those that were unloaded and then found to be unable to rise. Animals that are down and unable to rise should not be moved, they should be euthanized where they are found. Other animals that can walk should be moved out the area first.	



S3. Preslaughter Handling



Number	Requirement	Level
S3.1	Animals that are down and unable to rise shall be euthanized promptly using a method defined by these standards.	C
S3.2	The use of electric prods is prohibited.	Ma
	Low stress handling aids such as flags, rattle paddles and sorting boards are acceptable.	
S3.3	Holding pens shall provide enough space for animals to move around and lie down together.	Ma
S3.4	Holding pens shall provide shade and shelter to maintain alpaca thermal comfort.	Ma
	Maintaining thermal comfort in hot weather could include the use of fans or water misters. Maintaining thermal comfort in cold weather could include providing bedding in holding pens and reducing airflow through areas where live animals are held – while maintaining ventilation.	
S3.5	Water shall be provided in holding pens.	Ma
S3.6	If animals are held for 12 hours or more they shall be fed.	Ma
	If animals may be held for 12 hours or more the slaughter site should have suitable feed or fodder available.	
S3.7	Flooring in all areas accessed by live animals shall be non-slip to prevent animals slipping or falling.	Ma
	Areas accessed by live animals that should be non-slip include unloading ramps, holding pens, passageways and the stun box. Concrete surfaces should be grooved or covered with a non-slip material to reduce the risk of animals slipping and falling. Passageways should	



Number	Requirement	Level
	be kept clean. If flooring is covered with wet manure it increases the risk of slips and falls.	




S4. Slaughter Equipment

Number	Requirement	Level
S4.1	Suitable equipment including reserve equipment for the slaughter of alpacas shall be available.	Ma
	Reserve equipment does not have to be of the same type as the main slaughter equipment as long as it a method accepted by these standards.	
S4.2	Stunning/slaughter equipment shall be well maintained as per the manufacturer's instructions.	Ma
	Penetrating captive bolt guns and firearms should be cleaned daily. Electric stunners should have the electrodes cleaned to ensure good contact every 20 to 25 animals. Additional periodic maintenance for all these methods should be completed as per manufacturer's instructions Maintenance requirements include any reserve equipment that may not be in daily use.	



S5. Stunning and Killing Methods

Number	Requirement	Level
S5.1	Animals shall be stunned using a method that causes immediate unconsciousness that lasts until death. Acceptable methods for alpacas are as follows: <ul style="list-style-type: none"> a. Penetrating captive bolt guns b. Firearm 	C
S5.2	The stunning or killing device shall be positioned correctly according to the species and the method being used.	Ma
S5.3	If electrical stunning is used an appropriate current that causes alpacas to become immediately insensible must be used.	Ma
	There is a lack of data on this method of slaughter for alpacas, but it is expected that a minimum current of 1.00 Amp will be needed to achieve immediate insensibility. There should be meters associated with electrical stunners which display the current and/or failsafe systems that do not permit use of the equipment if the current is below acceptable levels.	
S5.4	If electrical stunning is used electrodes shall be positioned to span the brain of the animal.	Ma
S5.5	The correct cartridge or propellant for alpacas shall be used with captive bolts or firearms.	Ma
S5.6	Alpacas shall not be shackled and/or hoisted unless they have first been effectively stunned.	C
S5.7	If animals show any sign of sensibility they shall be immediately re-stunned.	Ma
	If an animal is not stunned at the first attempt, after an effective re-stun of that animal there should be a check on whether the equipment is functioning correctly and that the person carrying out stunning is positioning and using the equipment according to the SOP before an attempt is made to stun the next animal.	



Number	Requirement	Level
S5.8	Animals shall be checked to ensure they are insensible before being bled.	Ma
	Signs of ineffective stunning and/or a return to sensibility include: corneal reflex in response to touch, rhythmic breathing where the ribs move in and out at least twice, spontaneous blinking, vocalization and a righting reflex from animals that have been hung on the rail.	
S5.9	Following stunning alpacas shall be bled as soon as possible.	Ma
	S5.9.1 Alpacas shall be bled within 15 seconds of head-only electrical stunning.	Mi
	Animals can recover from head-only electrical stunning. To ensure that the insensibility that is caused by the electric stun is maintained until death, the animal should be bled as soon as possible and within 15 seconds after an effective stun.	
	S5.9.2 Alpaca shall be bled within 60 seconds of head/heart electrical stunning, captive bolt stunning, or shooting with a firearm.	Mi
	The methods listed above when carried out correctly should cause death, but prompt bleeding is still required to ensure there is no possibility of the animal regaining consciousness.	
S5.8	The bleed wound shall sever the major blood vessels in the neck and allow rapid blood loss such that insensibility is maintained until the point of death.	Ma
S5.9	No further processing shall be carried out until the death of the alpaca has been verified.	Ma
S5.10	Alpacas shall not be slaughtered in sight of other animals.	Ma



S6. Chain of Custody

Number	Requirement	Level
S6.1	The slaughter site shall have a plan that shows how incoming alpacas are identified, how skins from certified herds are identified from different herds and how the skins are handled from removal from the carcass until the material leaves the facility.	Ma
S6.2	The slaughter plant shall have procedures for verifying that animals came from RAS-certified farms.	Ma
S6.3	Records shall be kept of the number of alpacas slaughtered from RAS-certified farms and the corresponding number of skins from RAS certified farms.	Ma