



**VEGETATION MANAGEMENT
STANDARDS
Sheep Grazing**

Effective April 1, 2007

These standards apply, in addition to the [General Standards for Ministry funded Programs \(FS 1001\)](#), to all sheep grazing for vegetation management funded under Ministry funded Programs.

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ARTICLE 1: GENERAL CONDITIONS

Definitions

1.1 In this document the following words shall have the following meanings:

“Approved Vegetation Management Quality Inspection System” means the inspection system contained in this document **or** another similar system approved in writing by the District Manager prior to the commencement of Work;

“Crop Tree Damage” means any of the following damage to a Well-spaced Crop Tree

- (a) browsing of the terminal leader,
- (b) browsing of 50% or more of the tips of lateral branches,
- (c) browsing of 50% or more of the foliage,
- (d) bending, breaking or uprooting, or
- (e) scarring greater than one-third [1/3] of the stem circumference;

“Livestock Health Management” means the Livestock Health Management and Regulation Unit, Abbotsford Agriculture Centre, BC Ministry of Agriculture, Food and Fisheries (toll free BC only 1-800-661-9903);

“Sheep Guidelines” means the [Sheep Vegetation Management Guidelines](#) as posted on the Ministry of Forests website;

“Shepherd Dog” means a dog used for shepherding or protecting sheep (guard dogs / sheep dogs);

“Well-spaced Crop Tree” means, for the purposes of this document only, a tree

- (a) Specified as a crop tree species,

- (b) which is equal to or greater than
 - i) a Specified minimum distance between it and other well-spaced crop trees, or
 - ii) if a minimum distance is not Specified, 2 metres distance between it and other well-spaced crop trees, and
- (c) which has, in comparison to any other potential crop tree within a Specified minimum inter-tree distance of it, the best combined characteristics of height, good health, straightness of stem, and single terminal leader of good growth.

Applicable Laws, etc.

- 1.2 Sheep grazing must comply with all federal and provincial laws, regulations, policies, procedures and standards applicable to carrying out a sheep vegetation management operation, including:
- (a) the [Sheep Guidelines](#);
 - (b) those acts listed in [Section 4 of the Sheep Guidelines](#);
 - (c) regulations/guidelines set by the Canadian Food Inspection Agency; and
 - (d) all other applicable federal and provincial acts, regulations and policies related to sheep.

ARTICLE 2: PRE-OPERATIONS REQUIREMENTS

Work Plan

- 2.1 Where any of the following is not specified in a Treatment Plan for vegetation management by sheep grazing it must be specified in a Work Plan:
- (a) by Treatment Unit
 - i) the target species for grazing,
 - ii) the criteria for a Well-spaced Crop Tree, if applicable,
 - iii) areas sheep must be kept out of, including any buffer zone designated by the Ministry of Water, Land and Air Protection,
 - iv) the number, weights and types of sheep to be used,
 - v) the number and types of Shepherd Dogs to be used, and
 - vi) the human resources to be utilized;
 - (b) the inspection criteria for determining satisfactory removal of the target species;
 - (c) measures necessary to
 - i) protect fish, wildlife and their habitat,
 - ii) minimize conflict between sheep and animals that could prey on them,
 - iii) protect irrigation and licensed domestic water supply intakes,
 - iv) prevent transmission of disease from livestock to wildlife, and
 - v) maintain the health of livestock;
 - (d) the name and contact information of the official of the Ministry of Water, Land and Air Protection who is to be notified before the arrival of livestock on a Work Area;
 - (e) a contingency plan in the event of an accident;
 - (f) a schedule of grazing on the Work Areas;
 - (g) other scheduling requirements and conditions as deemed necessary by the District Manager.

Materials Furnished by the District Manager

- 2.2 At the Recipient's request, the District Manager:
- (a) will provide access to, and allow the photocopying of any survey data and maps in its possession that are applicable to a Work Area; and
 - (b) may loan the applicable aerial photographs subject to any conditions of use which may be attached.

ARTICLE 3: GRAZING OPERATIONS

General Requirements

- 3.1 All livestock vegetation management activities must be in accordance with the Ministry Standards, Forest Investment Account (FIA) Standards, and Forest for Tomorrow (FFT) Standards including any standards or specifications stated or implied in the Approved Vegetation Management Quality Inspection System which forms part of the Ministry Standards, FIA Standards and FFT Standards.
- 3.2 Despite any requirement that is Specified on a per hectare basis, all requirements must be met throughout the entire Work Area so that the target species is uniformly removed.
- 3.3 The Recipient must notify the official named pursuant to section 2.1(d) of the intended arrival of sheep at least three Work Days before their arrival on a Work Area.

Operations Personnel Requirements

- 3.4 The project supervisor must have at least one season of experience in the use of sheep for managing forest vegetation, and must be familiar with the constraints and requirements of the applicable permits, the Animal Health Centre, and the [Sheep Guidelines](#).

Sheep Grazing on Work Areas

- 3.5 The following sheep operations procedures must be adhered to.
 - (a) Sheep must be moved between a corral and a Work Area, or between Work Areas, only on "non-productive ground" such as a road or a power line right-of-way.
 - (b) Sheep must be managed on Work Areas so
 - i) they do not enter a riparian management area within a community watershed,
 - ii) they do not utilize the same area for bedding down more than once (in order to avoid seedling damage),
 - iii) Crop Tree Damage is minimized, and
 - iv) all areas of the site receive adequate grazing.
 - (c) The condition of the crop tree species to be left untreated in each Work Area must be constantly monitored and the sheep moved if necessary to prevent unacceptable animal trampling or Crop Tree Damage.
- 3.6 The following sheep operations procedures must be adhered to near lakes, streams or other water bodies.
 - (a) A five metre buffer strip must be maintained along water bodies by controlling sheep movements through grazing/shepherding practices.
 - (b) Sheep must be kept out of streams, stream beds, buffer strips or other areas indicated in the Work Plan.
 - (c) Obstructions, landfill or any substance which may cause pollution must not be placed within the high-water level of any lake, stream channel or bed, or buffer strip.

Corrals

- 3.7 Corrals must not be constructed:
 - (a) within a riparian management area, or
 - (b) in an area that debris and waste products from the corrals will enter directly into a stream, lake or other watercourse bearing fish or used as a potable water source.

Daily Record Requirement

- 3.8 Daily records of grazing operations must be kept and must include:
 - (a) the date;

- (b) the Work Area being grazed;
 - (c) the number of workers and their duties on site;
 - (d) the number of sheep and Shepherd Dogs on site;
 - (e) the time of movement of sheep on to and off of Work Areas;
 - (f) problems encountered, including predator sightings and problems, lambing, sheep and Shepherd Dog health problems and the number of dead, physically injured or lost sheep and Shepherd Dogs; and
 - (g) the printed name and signature of the person who prepared the daily record.
- 3.9 The daily records must be made available for viewing upon the request of the District Manager, the Administrator, or a representative of the Ministry of Water, Land and Air Protection or Ministry of Agriculture, Food and Fisheries.

Information to be On-site

- 3.10 The following must be on site at all times:
- (a) a copy of the Ministry Standards, FIA Standards and/or FFT Standards;
 - (b) the Work Plan for the Work Area; and
 - (c) the daily record required by this document.

Removal of Sheep

- 3.11 Sheep must be moved or removed from the site when:
- (a) there is improper care of sheep;
 - (b) mortality of a herd is greater than 4%;
 - (c) sheep weight loss is excessive;
 - (d) vegetation becomes unpalatable or unsuitable for grazing;
 - (e) predators become a problem;
 - (f) weather conditions become unsuitable for grazing; or
 - (g) unacceptable Crop Tree Damage is occurring as a result of the grazing or the grazing animals.
- 3.12 The District Manager may order the removal of sheep in the event Ministry Standards, FIA Standards and/or FFT Standards are not being met.

Animal Health

- 3.13 Only sheep that have been inspected and certified as required by the Ministry of Agriculture, Food and Fisheries may be used.
- 3.14 Corrals must have satellite sections for holding sick and injured sheep, or Shepherd Dogs.
- 3.15 At the District Manager's discretion, an autopsy by a veterinarian may be required to determine the cause of death of a sheep. The Recipient shall be responsible for all costs and the District Manager shall receive a copy of the autopsy report.

ARTICLE 4: INSPECTION & NOTIFICATION

Inspector's Qualifications

- 4.1 All Work must be inspected by a person (the "Inspector") who is:
- (a) the Registered Professional Forester (RPF), or operates under the direction of the RPF, who will sign and professionally seal reports for the Work;
 - (b) experienced and competent in conducting inspections of grazing operations;
 - (c) familiar with the Treatment Plans and Work Plans for the Work Areas; and
 - (d) not engaged in the direct conduct of the grazing operations.

Quality Inspection - General

- 4.2 An Inspector must inspect the Work in accordance with an Approved Vegetation Management Quality Inspection System in a timely manner to ensure all Work is performed to the Ministry Standards, FIA Standards and/or FFT Standards.
- 4.3 Unless otherwise approved by a District Manager, the methodology given in this Article shall form the basis for the Approved Vegetation Management Quality Inspection System.

Determining Satisfactory Vegetation Treatment

- 4.4 To determine the quality of Work, the Inspector shall:
- (a) establish inspection plots
 - i) having a radius of 1.78 metres (10 sq. m),
 - ii) to a minimum of 0.2% sampling intensity (2 plots per ha.),
 - iii) well distributed throughout the area being inspected; and
 - (b) mark the plots in the field and record them on a survey map such that the Province can locate the plots for a period of up to three months after their establishment or until they may be covered for an extended period by snow, whichever is sooner.
- 4.5 The Inspector may consider vegetation removal within a plot to be satisfactory when, unless otherwise specified by the District Manager, 85% or more of the target vegetation species cover in a Treatment Unit has been removed by the end of the grazing season. Satisfactory removal of vegetation cover shall be as described in a Treatment Plan or a Work Plan.
- 4.6 The Inspector may consider a Work Area or contiguous portion of a Work Area satisfactorily treated when, using only those plots which contain one or more of the target species, at least 90% of the plots for that area are satisfactorily treated (the "performance quality" percentage), and the satisfactorily treated plots are well-distributed throughout the area.

Determining Satisfactory Crop Tree Protection

- 4.7 When the protection of crop trees is Specified, the inspector shall overlay at each plot a second plot having radius of 3.99 metres (50 sq. m) and shall:
- (a) count the number of Well-spaced Crop Trees within the plot; and
 - (b) examine each Well-spaced Crop Tree and record any Crop Tree Damage (Crop Tree Damage caused by a Recipient's horse shall be assessed the same as sheep damage).
- 4.8 The Inspector shall determine for each Treatment Unit or contiguous portion of a Treatment Unit, the percentage of Well-spaced Crop Trees having Crop Tree Damage by:
- (a) totaling over all plots in the area,
 - i) the number of Well-spaced Crop Trees having Crop Tree Damage (Total 'A'), and
 - ii) the number of Well-spaced Crop Trees (Total 'B');
 - (b) dividing Total 'A' by Total 'B'; and
 - (c) multiplying the result by 100 to express it as a percentage.
- 4.9 The Inspector may declare Crop Tree Damage acceptable on an area when it is less than 5% as determined using the calculation in the previous section, provided there are no contiguous areas greater than 1/10 of a hectare having concentrated Crop Tree Damage in excess of 10%.

Requirement to Notify the District Manager

- 4.10 In addition to any requirements in the [Sheep Guidelines](#), the Recipient must immediately notify the District Manager of unsatisfactory performance whenever an inspection reveals, on any contiguous area greater than one-tenth (1/10) hectare:
- (a) performance quality to be less than the Specified minimum acceptable standard, and the nature and extent of the errors are such that performance quality cannot be raised to at least that standard; or
 - (b) Crop Tree Damage has occurred to more than 10% of crop trees on a portion of a Work Area greater than 1/10th hectare or to more than 5% of crop trees over an entire Treatment Unit.