



Ministry
of Forests



FIA VEGETATION MANAGEMENT STANDARDS - Sheep Grazing

Effective April 1, 2002

These standards apply, in addition to the General FIA Standards (FS 1001), to all sheep grazing for vegetation management funded under the Forest Investment Account (FIA).

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ARTICLE 1: GENERAL CONDITIONS

Definitions

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

"Animal Health Centre" means the Animal Health Centre of the BC Ministry of Agriculture, Food and Fisheries (toll free (BC only) 1-800-661-9903);

"Approved Vegetation Management Quality Inspection System" or **"Approved VMQI 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;

"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;

"Specified" means, as the context so requires, specified in an Approved Plan or Work Plan, in a FIA Standard, or by a District Manager;

"Treatment Type" means the particular method of treatment that is Specified for a Work Area;

“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 The Recipient 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 an Approved Plan for vegetation management by sheep grazing it must be specified by Treatment Unit in a Work Plan:
- (a) the target species for grazing;
 - (b) the inspection criteria for determining satisfactory removal of the target species;
 - (c) the crop tree species not to be grazed, if any;
 - (d) limits for acceptable levels and kinds of site disturbances for each Work Area and/or Treatment Type;
 - (e) areas sheep must be kept out of;
 - (f) the number, weights and types of sheep to be used;
 - (g) the number and types of Shepherd Dogs to be used;
 - (h) a contingency plan in the event of an accident;
 - (i) a schedule of grazing on the Work Areas;
 - (j) radio frequencies to be used for communication;
 - (k) the human resources to be utilized; and
 - (l) 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 Planning 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 FIA Standards, including any standards or specifications stated or implied in the Approved VMQI System which forms part of the FIA 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 Vegetation is uniformly removed.

Operations Personnel Requirements

- 3.3 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](#).
- 3.4 The District Manager may require a demonstration that all persons performing the Work are adequately equipped and trained to take remedial action in the event of predator/sheep interaction or matters relating to the health of the sheep.

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) no Crop Tree Damage occurs (from fast turning out, etc.), and
 - ii) all areas of the site receive adequate grazing.
 - (c) Sheep must not utilize the same area for bedding down more than once (in order to avoid seedling damage).
 - (d) 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 Approved Plan or 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.
- 3.7 The District Manager may direct the Recipient to suspend Work for either a specified or an indefinite period where the District Manager determines that weather or other conditions are unsuitable.

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 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 FIA Standards;
 - (b) the applicable Approved Plan for the Work Area;
 - (c) the Work Plan and
 - (d) the daily record required by this document.

Site Degradation

- 3.11 The site productivity of the Work Areas must not be degraded by any means, whether directly or indirectly, and without limiting the generality of the foregoing, Specified limits for acceptable levels and kinds of site disturbances for each Work Area and/or Treatment Type must not be exceeded.

Animal Health, Escapes, and Predator Problems

- 3.12 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; or
 - (f) unacceptable Crop Tree Damage is occurring as a result of the grazing or the grazing animals.
- 3.13 Corrals must have satellite pens for holding sick and injured sheep or Shepherd Dogs.
- 3.14 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 The Recipient shall engage a person to inspect the Work (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 Approved Plans and Work Plan 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 (VMQI) in a timely manner to ensure all Work is performed to the FIA 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, 85% or more of the target vegetation species cover has been removed by the end of the grazing season. Satisfactory removal of vegetation cover shall be as described in an Approved 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 Work Area or contiguous portion of a Work Area, 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 and the Administrator

- 4.10 In addition to any requirements in the [Sheep Guidelines](#), the Recipient shall immediately notify the District Manager and the Administrator 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;
 - (b) a Specified limit for site degradation on an area has been exceeded; or
 - (c) Crop Tree Damage has occurred to more than 10% of crop trees.