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ESTABLISHMENT AND MAINTENANCE OF FOOTROT AREA STATUS

Since the introduction of the New South Wales Footrot Strategic Plan in 1988 there has been a significant reduction in the prevalence of footrot throughout the State's sheep flocks. The last Residual Areas progressed to Control Area status in June 2002 and all of NSW is now gazetted as either Protected or Control Area status for footrot. The disease is now under full regulatory control throughout all of NSW. The flock prevalence of footrot in Protected Areas is less than 1% while Control Areas have a flock prevalence of 1–10%. Areas formerly classified as Residual had a prevalence above 10%.

The granting of Protected status is based on demonstrating that an area has a flock prevalence of footrot <1% and the Board demonstrating the ability to comply with policies and procedures designed to maintain prevalence at or below this level. Health restrictions on the introduction of sheep into the area coupled with surveillance, notification, quarantine and eradication activities must be implemented to ensure that the prevalence remains low.

Sheep producers are encouraged to source replacement sheep from flocks in Protected Areas on the basis that the chance of buying sheep infected with footrot is very low. It is important that the sheep industry has confidence that Protected status is allocated to areas with a low prevalence, but also that continuous activity is undertaken to ensure that the low prevalence is maintained.

DECLARATION OF PROTECTED AND CONTROL AREAS

Under section 11A of the Stock Diseases Act, the Minister declares Protected and Protected (Control) Areas by publishing a notice in the Government Gazette. This notification includes a description of the area to which the notification applies. It also describes the restrictions on bringing stock into the area.

The NSW Footrot Steering Committee makes recommendations to CDAI that particular areas should be gazetted as Protected (or Control) Areas. Individual Boards apply to the Footrot Steering Committee for progression of area status based on providing sufficient information to demonstrate that they meet the criteria (<1% footrot flock prevalence for Protected Area) and have resources to maintain this level. This information should include:

- A description of the area (suitable for a legal description) together with a map of the proposed area.
- The base number of sheep flocks (with 50 or more sheep) in the area.
- An accurate estimate of the current flock prevalence.
- A description of the method used to determine the flock prevalence. This should include results of random surveys, group statistics and details of significant flock inspections. Questionnaires are not an acceptable method to determine prevalence. Appendix 1 describes the procedures for a footrot survey, based on the protocol for a Protected Area audit.
- An estimate of the number of quarantines anticipated and a description of the resources available to administer quarantines and eradicate infection.
- Any supporting information which the Board deems necessary.
- A supporting statement from the SFVO for the area.

The ability and willingness to maintain a low flock prevalence of footrot over time is equally as important as the prevalence at the time of the application.

MAINTENANCE OF PROTECTED AND CONTROL AREA STATUS

Footrot audits (Appendix 1) have been used in the past to independently assess the footrot prevalence in Boards with Protected Area status. These survey audits have limited value as they are costly, they cannot be undertaken in drought conditions, and it may be many years before some Boards are audited at all.

A satisfactory assessment of the effectiveness of surveillance and eradication activities and producer compliance with their obligations relating to movement restrictions, notification and quarantine is another way of demonstrating that a district is meeting its obligations and provides confidence that the area status is appropriate.

Commencing 31 January 2005, each RLPB is required to submit to the SFVO an "Annual Footrot Return" for the previous calendar year to justify maintenance of their footrot status. The SFVO will submit a consolidated regional report to the Program Leader, Flock Health who will prepare a state-wide report for the NSW Footrot Steering Committee. Independent footrot audits of Protected Areas will continue as considered appropriate by the Footrot Steering Committee.

Annual Footrot Return

The annual return is to include the following information.

- Flock prevalence of footrot at 31 December.
- A summary of the quarantine activity over the previous 12 months (i.e. number of quarantines at start and end of period, number new and number released).
- Progress report on each farm in quarantine for more than 2 years.
- Number of new footrot detections and how these were identified.
- Source of new footrot infections.
- Description of surveillance activities undertaken:
 - Lameness investigations
 - Saleyard inspections
 - Laboratory testing
 - Number of traceforward/traceback reports sent/investigated
 - Survey activities

- Evidence to show that there is compliance with movement restrictions
- Summary of breaches (relating to footrot) detected and description of the regulatory action taken in response to each breach
- Footrot related publicity undertaken in the last 12 months (attach copies as appropriate)
- Staff resources and any relevant training undertaken in last 12 months.

In view of the extra detail provided in the Annual Footrot Return, the mid-year report required by the Footrot Steering Committee can now be reduced to provide basic details on quarantine statistics. A summary of footrot quarantines is still required to monitor progress at the end of June. This should include number of flocks in quarantine, number of flocks in quarantine for more than 3 years, number of quarantine releases and new quarantines plus number of goat herds in quarantine.

Review of Footrot Records by SFVO

To bring additional credibility to this reporting process, each Board must arrange for their footrot records to be reviewed annually by their SFVO who will report the findings to the Board and Program Leader Flock Health. This review could be done when developing Animal Health Plans. The SFVO will:

- Review the files of quarantined properties.
- Assess progress being made with eradication programs.
- Review the circumstances of all new footrot detections.
- Identify the records on which surveillance statistics are/will be based and advise on the reliability of the results.
- Review details of all breaches relating to footrot detected.

SFVOs are encouraged to develop a standard checklist to ensure consistency between Boards.

Report to Program Leader – Flock Health by SFVO

Each SFVO will provide a consolidated regional annual footrot report to the Program Leader - Flock Health. The report from the SFVO will comment on the activity that has been undertaken by each Board and whether any deficiencies were found and recommendations that were made on actions to be taken to correct defects.

Report to Footrot Steering Committee by Program Leader - Flock Health

The Program Leader - Flock Health will provide a consolidated state-wide report to the NSW Footrot Steering Committee. The report will comment on the activity that has been undertaken by each SFVO region or Board as relevant and whether there are any serious matters that require corrective action.

Corrective Actions

Where the Footrot Steering Committee is of the view that the Annual Footrot Return fails to demonstrate that sufficient activity is being undertaken to justify Protected/Control Area status, the Board will be advised in writing of the corrective action required. In these cases, Boards will be expected to provide a report on implementation of these corrective actions to the next Footrot Steering Committee meeting from which feedback will be provided.

If there has been insufficient progress at the time of the next Annual Return, the Footrot Steering Committee may ask the Board to provide reasons why the status of the area should not be downgraded. If this reply is unsatisfactory, the Footrot Steering Committee may recommend to the CDAI that the area status be changed accordingly.

APPROVED

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Appendix 1

NSW FOOTROT STRATEGIC PLAN PROTOCOL FOR FOOTROT SURVEYS

Introduction

Applications to progress footrot area status require an accurate estimation of footrot flock prevalence. This is best determined by random surveys and following a protocol similar to that used when validating the status of established Protected Areas by auditing flock prevalence under the terms of the NSW Footrot Strategic Plan. The area to be surveyed is usually a Rural Lands Protection Board as a whole or a smaller section as required. The process will take the form of a randomised survey of sheep flocks within the boundary determined. Flocks identified as infected in the survey will be subject to the Footrot Notification Policy (AI Circulars 2003/24-25) and required to undergo an eradication program as per AI Circular 2003/23 on Footrot Eradication Procedures.

Objective

The specific objective is to demonstrate the stated flock prevalence within a Rural Lands Protection Board in accordance with the NSW Footrot Strategic Plan criteria of <1% for Protected Area status. Basically the survey will be devised on a 90% confidence, for a 2% prevalence; of finding at least one positive flock, with a precision of 4% (refer to table on final page).

Sampling Frame

Flock size

Included in the sampling frame will be flocks with 500 or more sheep. Stratification may be considered. The reason for choosing this figure (500 or more) as a baseline is that flocks of this size or greater constitute a significant sheep operation and are likely to have adequate to reasonable sheep handling facilities such as yards, drafting races, shearing sheds etc. They are more likely to remain in operation in most years. They will also allow selection of a minimum of 150 sheep for the audit.

Note: The Footrot Strategic Plan defines a flock as having 50 sheep or more. This figure provides for a baseline (denominator) on which overall flock prevalence can be determined.

RLPB Databases

Each RLPB should have available a database capable of identifying sheep holdings as a first prerequisite and secondly be able to search for flocks of a given size or range. The sampling frame for each Board for the purposes of the survey is flocks with 500 or more sheep.

The database is interrogated to determine the total number of flocks meeting the criteria. Names and addresses are not required at this stage. From epidemiological tables it is possible to specify the number of flocks to be inspected for a 90% confidence of finding a prevalence of 2% (tables attached).

Once the database has identified the total number of flocks available to be surveyed a list is printed in an order whereby a number can be allocated to use with the random number list (below). Once the property is identified (name, address, block, phone number, directions etc) audit lists are prepared (main and substitution lists – see below)

Random Numbers

Two random number lists are generated (by EpiTable from Epi Info). Specified as a main list and a substitution list these lists of random numbers are used to select the survey flocks from the numerical list of assessment numbers. The main list identifies the properties to be surveyed while the substitution list provides for replacement flocks in strict random order.

Notification of Survey Property Owners

A letter is to be sent to all owners identified to be surveyed from the main list advising them of the survey and its objectives. The terms of the survey, advice concerning the results and outcomes where virulent footrot is found are to be set out in the letter. Owners should then be contacted to arrange inspection visits. Refusal of any owners to cooperate in the survey should be noted and reasons given. A high refusal rate could mean the survey will be considered invalid.

The selection of sheep on the property is set out in the section on "Field Inspections" below.

The survey should preferably be carried out at an optimal period for the disease in the specified area.

Field Inspections

Selection of sheep

- A minimum of 150 sheep are to be examined (tipped over) and footscored. This may consist of part of one mob or a mixed age group (may include weaners) which best represents the flock as a whole. This figure may be varied should virulent footrot be diagnosed, in which case the examination of extra sheep would not be necessary.
- The particular mob may be chosen by the owner or the Board. If the latter, this would require a flock inventory to be provided in advance to allow for mob specification.
- The selected sheep (ewes or wethers) must be 2 years of age or more, and must have been bred on the property or have been on the property for at least 2 years.
- The owner is requested to yard the sheep on the day organised and provide whatever assistance is required.
- The selected sheep should be a random draft from the mob.
- The inspections should not be carried out less than six weeks after any treatment (footbath or antibiotics).
- Records of any prior treatments are to be provided.
- Each of the 150 sheep drafted for inspection will be tipped through a sheep handler and footscored on the system (0, 1, 2, 3a, 3b, 3c, 4, 5) adopted from Stewart et al as the standard system for the NSW Footrot Strategic Plan.
- Footscores are recorded on a sheet.
- Samples of any suspicious lesions (preferably score 2 or higher) are to be taken from a maximum of 5 sheep and forwarded to RVL Orange for culture and gelatin gel testing.
- A field survey sheet is completed with details of the flock, previous history, treatments, etc.
- A Field Clinical Diagnosis (FCD) is given at the time of the visit (virulent, benign or not footrot). This may be entered on a priority basis.

- An environmental assessment is made using the criteria from the attached field sheet.

At the end of the survey a follow-up letter should be sent acknowledging cooperation of producers and summarising the results for the area.

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**NSW Footrot Strategic Plan
Protocol for District Footrot Audits/Footrot Surveys**

Sample Size Calculator

Confidence Level @ 90%
Prevalence @ 2%

Sampling Frame Population	Sample Size 4% Precision
100	26
200	29
300	30
400	31
500	32
600	32
700	32
800	32
≥900	32

Confidence Level @ 95%
Prevalence @ 2%

Sampling Frame Population	Sample Size 4% Precision
100	33
200	39
300	41
400	43
500	44
600	44
700	45
800	45
≥900	45