

TB QUALITY ASSURANCE SCHEME

I H. WALKER
(Vet Services (H B) Ltd)

The importance of TB to New Zealand as a trading nation is well recognized. The importance to the deer industry is also well recognized as was reflected by the amount of discussion on TB at the recent Deer Farmers Association Conference.

The primary purpose of a Quality Assurance Scheme for deer TB testing is to maximize the effectiveness of control of TB. This is the ultimate goal to all parties involved, but also parallels the deer industry's thrust for excellence as reflected in the recently announced strategic plan. Similar schemes are being investigated in the velvet industry and deer transport at the moment.

The concept of a quality system has been discussed earlier this morning. It was the objective of the Game Industry Board, Deer Farmer's Association, Ministry of Agriculture and Fisheries, and the Deer Branch of the New Zealand Veterinary Association meeting recently to proceed part-way down a path towards a total quality management system with the TB testing programme.

The format of this contribution will be a general discussion on some of the ground covered at the meeting between DFA, GIB, MAF, and Deer Branch. The results of some of these discussions have yet to be finalized and recorded, but hopefully I can give you some appreciation of the process involved.

A OBJECTIVE

Our objective was to establish a flow chart of the overall deer testing procedure, identify and record standards pertinent to testing and decision making procedures, with particular reference to identifying critical points in the process which impact upon the success of the TB control scheme.

The end result is to be a description of all facets of the testing which will be printed in a manual for all testing officers.

Once the process is fully described, it will form a basis for accountability of all people involved in the overall scheme including assurance that standards set out are being achieved.

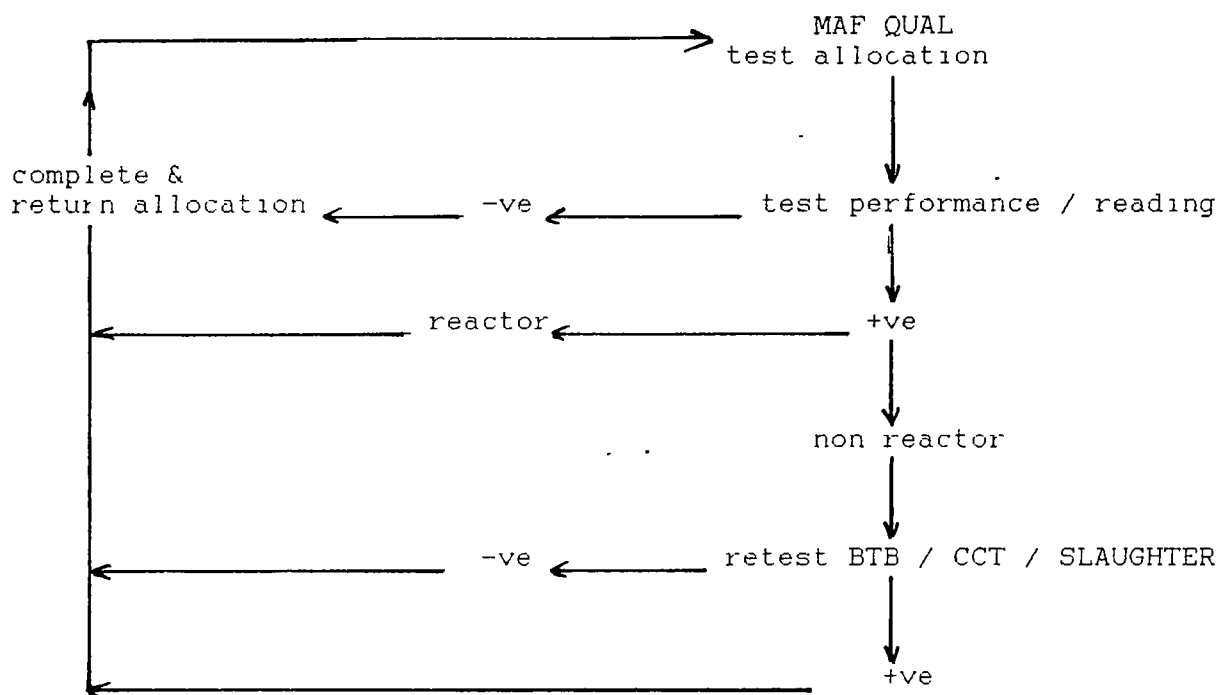
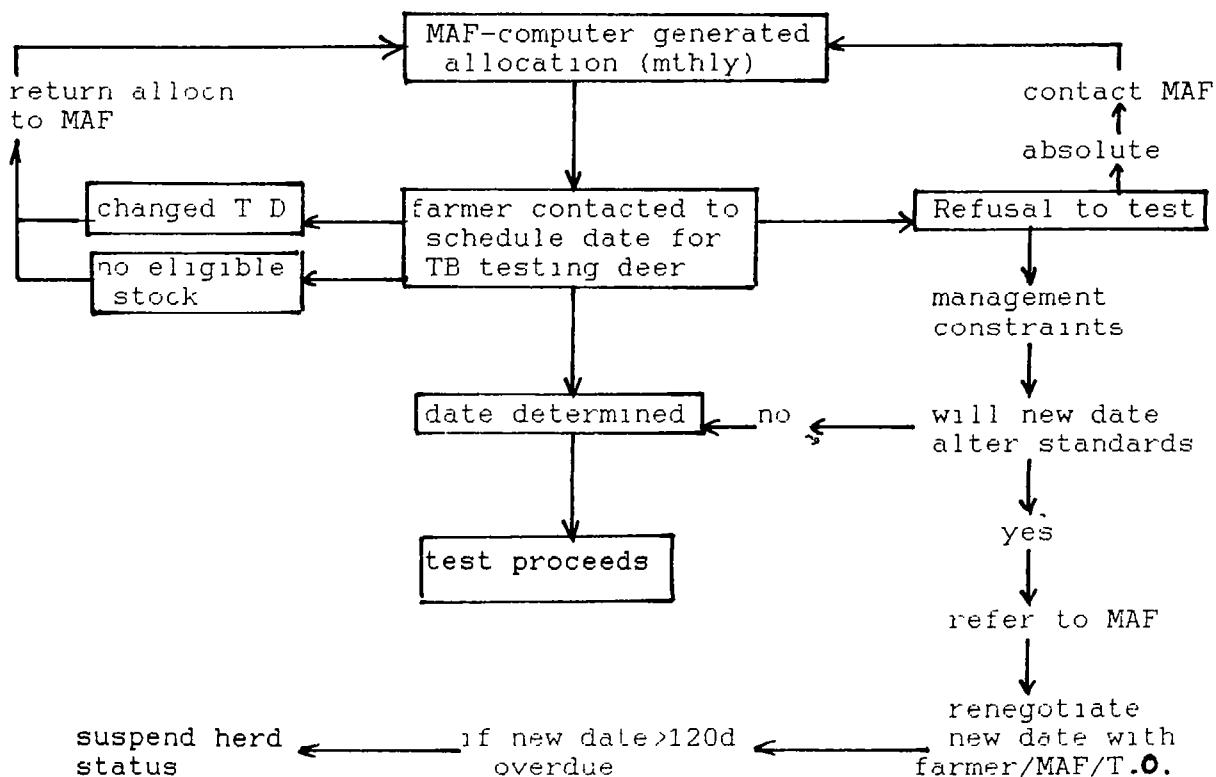
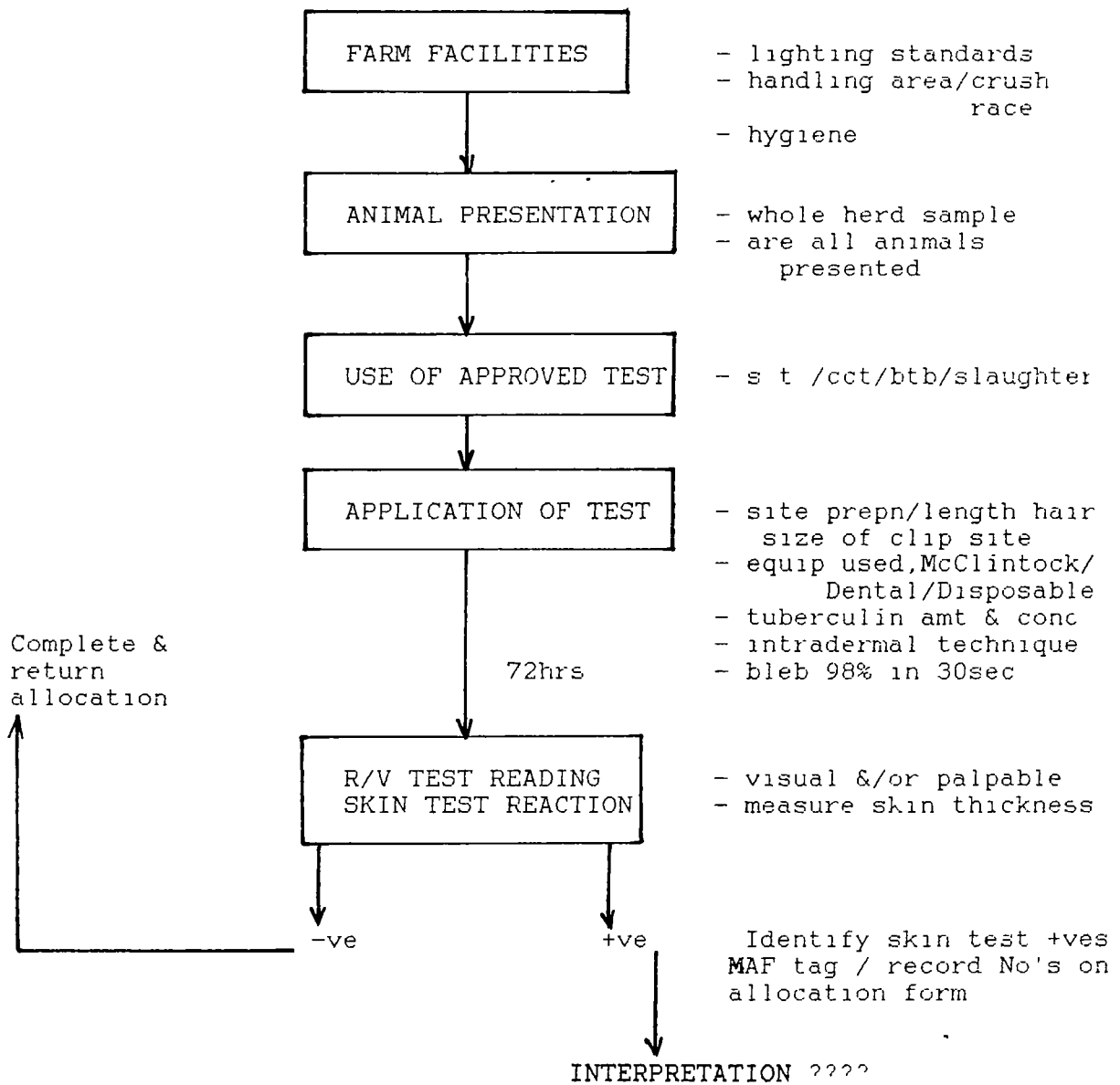
B 1) SIMPLE VIEW OF TESTING PROCEDURE

Diagram 1 immediately introduces the importance of TB test allocations. A formal recording system is fundamental to any disease control scheme.

2) TEST ALLOCATIONS

Completion of test allocation is fundamental to the operation of this scheme. Continuity of the scheme will be ensured provided relevant information is recorded on test allocations and that they proceed between MAF Qual Administration and Veterinarians. Standards of timeliness are appropriate including frequency of generation of allocation, response times to perform tests by T.O 's, and the return of allocations. It is not difficult to have checks on this information flow.

3) TEST PERFORMANCE



This raises many of the issues we are all familiar with. Most of the procedures and standards associated with test performance factors mentioned here are already well documented in various publications e.g. "TB Testing of Deer", MAF instruction modules, Blood Testing Manual etc.

The most important issue is that the standards required need to be stipulated, that they are adhered to and thus consistent results are obtained in test application

4) HERD HISTORY

The interpretation of a skin test +ve animal and a decision on its outcome is extremely important both to satisfy the objective of the National Control Scheme and to determine the status of the farm. In this process, the objective of looking for disease cannot be compromised. The decision of which test to select depends on the herd history, and then the parameters of the various available test options

e g Factors to consider in herd history

1) TB AREA / CLASS

- a) Endemic
- b) Fringe
- c) Non endemic
- d) Surveillance

Risk assessment in these areas

If possum control, the risk of disease decreases

2) ADJACENT FARMS

Herd breakdowns

Management factors e g trading

3) HERD HISTORY

Current status and longevity of it

Previous testing history -- non specificity

Cattle status on farm

How many test +ve

4) HERD MANAGEMENT FACTORS

Herd open / closed

Are test +ves in introduced animals

Age group of reactors

Farm grazing groups

Off-farm grazing

other factors → non specificity

no of animals from herd being slaughtered

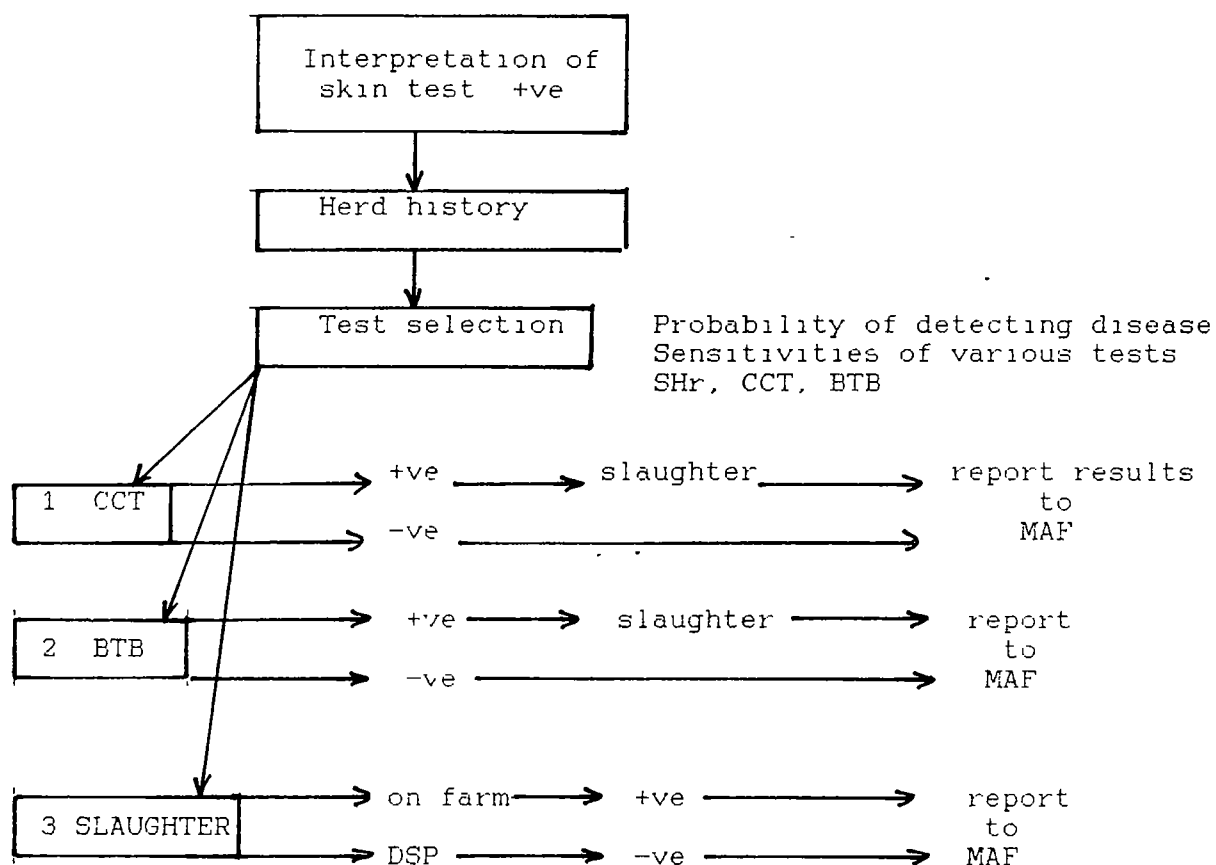
economics (value of tests & animals)

5) IMPLICATIONS TO OTHER PARTICIPANTS

e g Stock auctions

Selection and performance of a test based on the herd history and a high probability of detecting disease then determines the outcome of the skin test +ve animal

The wheel turns again as the ancillary test has test performance criteria applied and the ultimate result of either confirming or excluding infection



The ancillary test result may then affect the status of the farm on which the animals are tested, depending on whether TB is confirmed or in fact if the infection has been excluded. The end result is the imposition, maintenance or removal of a movement control notice. This is an extremely important decision particularly to the farmer with the emotive issues surrounding TB currently and the effect on national statistics.

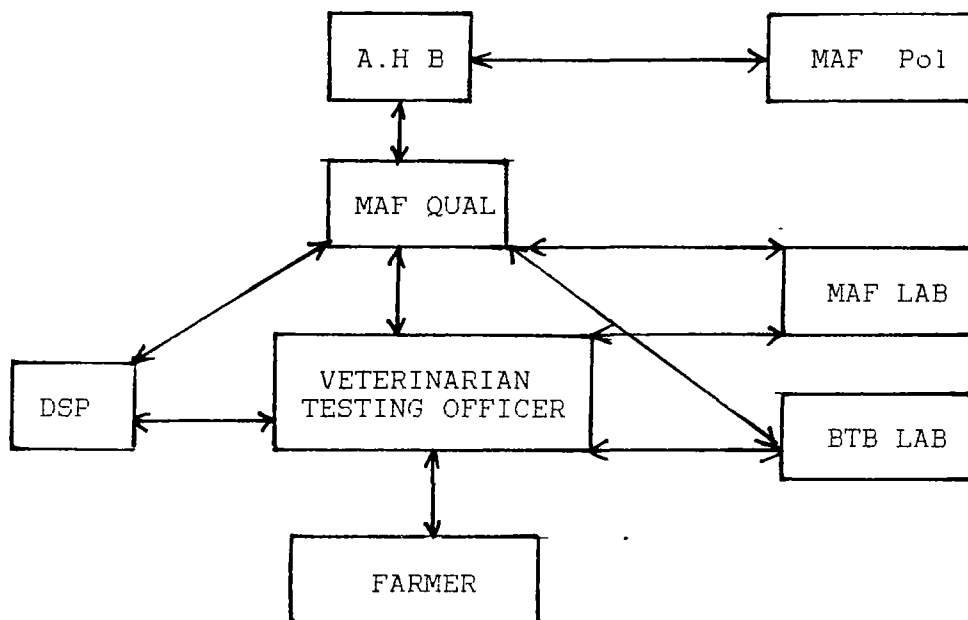
Although the procedures described are not inclusive of all the factors in TB testing, they demonstrate the principle of establishing the first steps in a quality system.

The process is flow charted and described and all the standards are defined. Some of the critical points in the testing system are identified, and the decision tree to reach a satisfactory endpoint is made.

COMMUNICATION

The TB testing system so far described also demonstrates a critical area in the overall success of the scheme and that is the communication between all the players in the delivery of the TB control scheme.

This can be summarized as



The testing officer is the pivotal link in the overall communication network. He has the overall responsibility of arranging and performing the test, explaining the outcome to the farmer and ensuring all results are reported to the farmer and MAF Qual. This in my opinion is the key person to the overall success of the scheme.

TESTING OFFICER

Because of the importance of the T.O. a further development in the quality system may be establishing minimum qualifications for T.O's and then setting minimum requirements to maintain that status. This may occur in a physical way e.g. T.O. having to perform a minimum number of tests / year and attending regular education programmes, and using an audit procedure e.g. Taking T.O. performance from the data base. All contribute towards continual appraisal of T.O. performance.

CONCLUSIONS

Development of a Quality Assurance system for deer TB testing is the stimulus currently needed to address many of the issues confronting the deer TB scheme.

Few could argue that there are not weaknesses currently inherent with all participants in the overall scheme i.e. MAF Qual administration, Veterinarians / testing officers, Laboratory and DSP's and farmers themselves.

If this system will standardise procedures in a formal way, produce more consistent judgements and decisions and withstand auditing procedures of all steps in the pathway, then all parties will benefit from the progress made.