



Department of
Primary Industries and
Regional Development

Journal of the Department of Agriculture, Western Australia, Series 3

Volume 5
Number 6 November-December, 1956

Article 16

11-1956

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Recommended Citation

Tomlinson, A. R. (1956) "Myxomatosis - Its progress and future in W.A.," *Journal of the Department of Agriculture, Western Australia, Series 3*: Vol. 5: No. 6, Article 16.

Available at: https://library.dpird.wa.gov.au/journal_agriculture3/vol5/iss6/16

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MYXOMATOSIS

Its Progress and Future in W.A.

By A. R. TOMLINSON, Chief Vermin Control Officer

FEW people would have believed in 1951, that the huge rabbit population of Western Australia—estimated at over 50 millions—would have been reduced to the present low numbers. It was in 1951, that the Director of Agriculture, Mr. Baron Hay, arranged for some myxomatosis virus to be made available to Western Australia. The Veterinary Branch of the Department obtained a small supply, and in conjunction with the Agriculture Protection Board and Government Entomologist carried out initial trials. These were at Muresk, and on Mr. D. E. Ludeman's property at Bejoording where a low-grade infection was started.

Centres were established at various places where endeavours were made to start spreads, and where farmers could have rabbits infected. Owing to the limited supplies of virus available from the Eastern States, the number of centres was necessarily limited, but 13 had been established by the end of 1951.



A photograph taken in 1951 when the first attempts were made to start "spreads" at Muresk and Bejoording. Clippers were used to remove fur from an infected rabbit in order to encourage spread of the infection by mosquitoes

Immediate success was obtained in Beverley and Gnowangerup where relatively small spreads occurred, and at Geraldton where the spread was 80 miles long by 20 miles wide.

In 1952, the Commonwealth Serum Laboratories, mainly at the request of this State, commenced to prepare sufficiently large quantities of the virus for sale in ampoules, and since then supplies of ampoules have been available to farmers.

The Agriculture Protection Board persisted in its efforts to seed the disease over as much of the rabbit infested areas as possible—to an extent which far exceeded similar work in the Eastern States.

The Board, with the farmers and Vermin Boards who co-operated, has been well rewarded. All this groundwork resulted in increasing low-grade infections over large areas. Then there was the big spread in the Avon Valley in 1955, and this season myxomatosis has extended over most of the agricultural areas. The disease, coupled with the Protection Board's "1080" rabbit control scheme, and other control work has brought rabbits to their lowest level in this State within the memory of most farmers.

But what of the future? Despite the huge coverage obtained there were many pockets left untouched or only partly affected. We know only too well what this means. Within a year or two, these pockets could quickly repopulate the cleared areas.

Then there are the residual populations left after the successful outbreaks. Possibly only a few have been left on each property, but in theory two rabbits can increase to 13 millions in three years. In practice they may not be as prolific as that, but they will do their best, and will increase to many thousands.

We are several years behind the Eastern States in our spreads, and we now know the pattern which the disease is following there and will be followed here. In progressing from rabbit to rabbit the disease changes and in some instances becomes so weakened that it only immunises rabbits against the more virulent strains, so that they are protected, as human beings are protected from some diseases by vaccines.

Fortunately, this immunity from myxomatosis is not transmitted to the progeny. However, another factor has already become apparent. A hereditarily resistant strain of rabbits is slowly being built up. In other words, a course which was anticipated is now being followed. There are some rabbits—not many—which are naturally resistant and even immune to the disease, and they are slowly building up.

The scientists predict that in five to ten years myxomatosis will have lost most of its effectiveness by the increase in this immune strain.

However, between the present and this future stage we have a great opportunity to keep rabbits well under control, by maintaining normal control work such as warren destruction and poisoning. It is felt that these measures, together with the constant release of the original strain of virus, will also postpone the inevitable build-up in immunity.

The important things to do therefore, are:—

- (1) To destroy all warrens whether they appear to be populated or not.
- (2) To continue poisoning wherever there are any signs of rabbits.
- (3) To continue with inoculations from fresh ampoules—and remember, warren destruction and poisoning will not materially interfere with myxomatosis when it is spreading.

(From an A.B.C. Country Hour talk. By courtesy of the Australian Broadcasting Commission).

WHEAT QUALITY SURVEY

The Minister for Agriculture (Mr. E. K. Hoar), recently announced his approval of a proposal to institute a wheat quality survey in this State. In the coming harvest the work would include analyses of protein percentage and protein quality on the average samples collected for the annual f.a.q. determination from over 280 bulk handling receival sidings. In addition a more intensive study would be made of the individual deliveries at four or five selected sidings.

The first set of data would indicate the average quality which would be expected from any siding or district. The second series would be more of an exploratory nature to indicate the range of quality at any one siding and would be preliminary to the development of a suitable sampling technique for future years.

Mr. Hoar emphasised that during recent years there had been a number of changes in the pattern of wheat production in this State, such as the marked increase in production from new light land and the development of ley farming on clover pastures. These influences would affect the quality of the wheat being produced both between and within districts and it was highly desirable that a survey of the quality of the State's wheat should be undertaken. Information based on factual data was essential in order that sound consideration could be given to such questions as the supply of the requirements of the local trades for bread and biscuit making as well as the possibility of segregation for export on a grade basis.

Co-operative Bulk Handling Ltd. was keen that such a survey be instituted, said Mr. Hoar, and he was very grateful for their ready acquiescence to his request for assistance in the collection of the samples. The analyses would be carried out at the Government Chemical Laboratories and the cereal laboratory in the Department of Agriculture.