

FOR INFORMATION

NAMP Technical Committee Annual Meeting 2023

Agenda Item 4.1

Last updated: 17 August 2023

Prepared by *Teagan Fitzwater***NORTHERN AUSTRALIA QUARANTINE STRATEGY (NAQS)****RECOMMENDATION**

- a. That the NAMP Technical Committee NOTE the below report for NAQS managed Sentinel Herds in northern Australia

BACKGROUND**DISCUSSION****a. Bluetongue****Queensland****YORK DOWNS**

NAQS coordinated 12 monthly sample collections from the York Downs sentinel herd in Far North Queensland from July 2022 to June 2023. July and August bleeds consisted of the old herd in which thirteen animals were bled and three animals remained seronegative in August. In September, a new herd of 17 cattle was recruited, of which 10 were positive on recruitment. In October, 15 animals were bled, with 8 remaining positive. In November 8 animals were bled of which one was previously positive and the rest were negative. An additional nine animals were recruited and bled in November totaling 17. 6 were positive and 11 tested negative, and remained negative through until January.

In February 11 were bled, but due to a lab error, results for only 10 were received of which 5 were seroconverted and 5 remained negative. Samples from four of the seroconverted animals were tested with BTV qPCR /1. Three were positive and these samples went through to virus isolation. No virus isolated from any samples.

By March the remaining 5 animals had all seroconverted.

Eleven new animals were bled in April, ten in May and eleven in June.

In April there was one new seroconversion but this animal had last been bled at the end of January so the month of conversion is unknown. In May all 10 were positive, and in June 9 remained positive and 2 had returned to seronegative status.

BERTIEHAUGH

The Bertiehaugh old herd was bled in July and August with 7 animals bled in July and 8 in August. No seroconversions were recorded in July, and in August 6 animals were remaining positive and 2 had 'equivocal' results.

The Bertiehaugh herd was discontinued from September 2022.

Northern Territory

NAQS oversaw two sentinel herds in the Northern Territory in 2022-2023, Garrithiya and Gunbalanya.

GARRITHIYA

A recruitment bleed was carried out in July at Garrithiya with ten animals recruited for the new year. All 10 were bled in July and August of which 9 returned negative results. Ten were bled monthly from September to December. In October 9 were negative and one was a weak positive, all were negative in November and December bleeds.

In January the herd escaped and were unable to be recovered so 10 new animals were recruited in February. 9 of the animals were negative and 1 had an equivocal result. All animals were bled again in March of which 9 remained negative and 1 was a weak positive.

Bleeds were carried out consistently through April to June, with 10 animals bled each month. 8 animals in April had seroconverted. By June the remaining one negative animal had seroconverted.

GUNBALANYA

Thirty new animals were recruited in July and seven of the old herd were bled for follow-up sampling of which all were negative. Fifteen of the new recruits were bled in August, and thirteen in September with all testing negative in September. Results

for the August bleed currently can't be located from the lab, but will continue to be investigated.

12 animals were bled in October, 13 in November, and 12 in December. There were problems encountered at the Lab requiring tests to be re-validated. 13 from November were all negative. December results showed 10 animals were negative and 2 positives.

No bleed occurred in January. 12 were bled in February with 2 positive, and the remaining 9 negative. In March 8 had seroconverted, and one from February had remained positive.

Ten animals were bled each in April and May, and no bleed was carried out in June. All animals bled in April remained seropositive. Results for May and June are still pending.

Western Australia

NAQS manages the serosurveillance herd at Kalumburu. This herd was bled once in October 2022. The June 2023 bleed unfortunately did not occur. The visit was scheduled and attempted but was unable to be completed due to cancellations of charter flights and lack of pilots available.

In October 2022, there were 51 samples collected. The most appropriate (by age & prior testing history) 30 samples were selected for ELISA testing – 13 of these were positive.

PCR on the 51 samples showed 8 positives with typing showing 2 x Java-C, 2 x Malaysia-A2 and 1 x Malaysia-B. 17 samples were VNT tested for BTV15 (antibody) with 0 positives. 14 samples run through VNT for all Australian and related serotypes, with several low-level titres reflecting exposure to BTV 1, 5, 16 & 21.

The next visit to Kalumburu is scheduled to be in November 2023.

b. Akabane

Not Applicable

c. Bovine Ephemeral fever

BEF serology was run monthly on the two sentinel herds in Northern Territory and not in any other NAQS-managed herds. In the Garrithiya herd 10 animals were tested from July through to December with all results returning negative for BEF seroconversions. The herd escaped in January and were unable to be recovered, so a new recruitment was needed. By March, 8 animals were negative, one positive and one returned a 'trace' result. Results for Apr to June are still pending.

In Gunbalanya 30 new recruits were tested in July of which 2 tested positive, and 2 'trace' at the beginning of the year. Seven of the old herd were also tested and were all seronegative. By November six animals had seroconverted and by April, 8 remained negative with one positive and two 'trace'. Results for May & June are pending.

See Northern Territory report for full interpretation.

d. Summary of virus isolation, neutralisation and PCR tests performed

e. Entomology

Completed by NAQS entomology team in QLD, NT, WA ento report.

FINANCIAL IMPLICATIONS

2. N/A

CONSULTATION/COMMUNICATION

3. The Kulumburu herd continues to be a challenging location for both herd management and regular attendance at the site, but there has still been no suitable alternative found.

NEXT STEPS/ACTIONS

4. N/A

Attachment A: *Title of attachment in full*

Attachment B: *Title of attachment in full*