



Australian Government

Australian Quarantine and Inspection Service

Investigation into reportable goat mortality level on board a voyage from Fremantle to Port Louis, Mauritius July 2007

1. Purpose

To report on the investigation into the cause of the mortalities in goats loaded for the journey and to make recommendations with the objective of reducing the likelihood of a recurrence.

2. Summary

38 goats out of 304 died on a voyage from Fremantle to Mauritius which equates to a voyage mortality rate of 12.5%. The likely cause of the goat mortalities was inanition and enteritis.

3. Background

The investigation into the cause of the mortalities was completed by reviewing the following information:

1. Veterinarian's end of voyage report.
2. Veterinarian's daily reports
3. Records from the registered premises.
4. Report from the AQIS certifying veterinarian.

Table 1: Chronology of events

Action	Date
NOI and CRMP submitted	8 May 2007
NOI and CRMP approved	15 June 2007
304 goats loaded in Fremantle	25 June 2007
Notice of a notifiable incident received by AQIS	2 July 2007
Unloaded 266 goats Port Louis	10 July 2007

4. Findings

4.1 Registered Premises

The goats exported from Fremantle were resident in the registered premises for a minimum of 14 days before export. There were 3 mortalities in the goats during the time in the registered premises.

No abnormal circumstances were noted during the preparation of the goats in the registered premises.

4.2 Journey

The climatic condition for the goat decks were as follows

Table 4: Climatic conditions

Day of voyage	Dry bulb (°C)	Wet bulb (°C)	Humidity (%)	Mortalities	Daily water consumption (L/head)	Daily weather conditions from daily reports
1	N/A	N/A	N/A	0	N/A	Calm seas
2	21.2	16.5	62.8	0	3.62	Rather rough seas – crew placed planks on starboard side to keep goat pens from being saturated by the sea spray.
3	20.1	19.2	91.8	1	3.7	Goat was scouring, moribund – euthanased. Rough seas - crew placed planks on port side to keep goat pens from being saturated by the sea spray.
4	21.2	17	66	0	3.68	Started mixing chaff with pellets for goats.
5	21.4	17.1	65.2	3	4	Very rough seas.
6	22.8	19.2	71.6	1	3.85	Rough seas.
7	22.4	18	65.6	1	3.76	Roughest day so far on voyage.
8	22.3	17.4	62	5	3.65	Rough seas due to heavy swell.
9	23.1	19.7	73.1	3	3.97	Rough seas due to heavy swell.
10	24.1	21.4	78.8	4	3.88	Calmer today.
11	N/A	N/A	N/A	0	N/A	Moderate seas
12	24.6	20.6	69.8	5	3.80	Rather rough seas.
13	24.6	19.2	60.2	2	3.68	Rather rough seas.
14	N/A	N/A	N/A	7	N/A	N/A
15	25.9	21.4	67.3	5	3.95	Rather rough seas.
16	N/A	N/A	N/A	1	N/A	Calm in port

N/A – not available

Table 5: Mortality Summary

Day	Mortalities	Cumulative	% Mortality
Day 1	0	0	0
Day 2	0	0	0
Day 3	1	1	0.33
Day 4	0	1	0.33
Day 5	3	4	1.3
Day 6	1	5	1.6
Day 7	1	6	1.97
Day 8	5	11	3.6
Day 9	3	14	4.6
Day 10	4	18	5.9
Day 11	0	18	5.9
Day 12	5	23	7.6
Day 13	2	25	8.2
Day 14	7	32	10.5
Day 15	5	37	12.2
Day 16	1	38	12.5

The reportable mortality trigger for goats is 2%.

By day 4, the chaff was mixed with the pellets because the goats were not consuming the pellets. Throughout the rest of the voyage the entire amount of chaff and hay loaded was fed to the goats (600kg and 2.5 metric tons respectively). The onboard mortalities were either found dead or with scouring/diarrhoea.

5. Conclusion

The likely cause of the goat mortalities on board the vessel appears to have been inanition and enteritis (consistent with salmonellosis).

The weather during the voyage was reported as rough for the majority of the voyage.

6. Actions

The investigation report was forwarded to the Livestock Export Standards Advisory Committee.

AQIS suspended the exporter from exporting goats whilst the investigation was undertaken.

AQIS issued an Export Advisory Notice to ensure adequate chaff is fed to goats exported by sea.

AQIS is not permitting the export of goats on voyages longer than 10 days duration.

The exporter has not exported a consignment of goats at the time of publishing. If a consignment is exported by sea the following condition will apply:

- . An accredited veterinarian will be required to accompany the goats.