



DEPARTEMENT VAN LANDBOU
Direktoraat Dieregesondheid

AGR 02/001

DEPARTMENT OF AGRICULTURE
Directorate of Animal Health

Privaatsak/Private Bag X138, PRETORIA 0001

Dr. George Winneger
Assistant Deputy Administrator
Veterinary Services, USDA APHIS
Administration Building
14th and Independent Ave S.W.
WASHINGTON DC
20250

1994-07-15

Fax no: 091-202-6904171

Dear Dr. Winneger

*SCRAPIE FREEDOM STATUS: EXPORT OF SMALL RUMINANTS
FROM SOUTH AFRICA*

Innumerable changes have become a reality since the onset of reform in this country. This has a direct reflection on trade, and in particular on exports from South Africa. Where we have been isolated and prohibited from dealing in agricultural products with other countries before, various options are now unfolding and becoming available to us. We want to utilise these opportunities for the well being of our peoples in South Africa and seek the cooperation and assistance of our friends around the globe. Part of this is acceptance of our animal health status and our credibility as a certifying authority.

The Veterinary Services of South Africa have through the years, maintained its high standards of disease control and can claim success in disease eradication for a number of diseases viz. Rinderpest (1904), Bovine Contagious Pleuro Pneumonia (1924), Glanders (1945), East Coast fever (1954), Hog Cholera (1918) and Scrapie (introduced 1966 eradicated 1972). Many of these diseases are still endemic in other parts of Africa. Due to strict import control, diseases like Contagious Equine Metritis, Equine Encephalomyelitis, Equine Viral Arteritis, BSE, SVD, Brucella suis, Aujeszky's Disease, TGE, to name a few, remain exotic to the country.

This disease freedom status is an achievement we are proud of and will endeavour to keep it intact, to render our export agricultural products acceptable to other importing countries.

We wish you also to accept our Scrapie freedom status, particularly in view of the tremendous interest shown by prospective importers in USA (and elsewhere) in the South African boer goat and indigenous sheep breeds.

To substantiate our claims of Scrapie freedom, the following presentation is put forward to you for consideration and acceptance.

Verw.
Ref: 12/1/8/32/1 14/1/15/2/4

Navrae
Enquiries: DR. A. FAUL

Fax no: (012) 329-8292
Tel no: (012) 206-3311

South Africa is free from Scrapie.

Scrapie is a notifiable disease in terms of the Animal diseases Act, 1984 and the country has been officially free from Scrapie for the past 24 years.

The first ever outbreak was diagnosed in imported sheep in 1966, after being introduced from the UK. A total of six farms were infected; all of which could be traced to imported animals from the UK. The last case was diagnosed in 1972. Scrapie has never been diagnosed in goats in South Africa.

When the outbreaks occurred, a policy of stamping out was followed and the disease was eradicated by means of total depopulation of infected farms. This was accomplished by compulsory slaughter with compensation. A total of 2424 sheep were slaughtered. All farms where animals had made contact with sheep from the infected farms, were quarantined for a minimum period of 4 years. The disease was successfully eradicated and no further outbreaks occurred since 1972.

Small ruminant imports from countries where Scrapie occurs are prohibited. The only countries where live sheep & goats and genetics may be imported from, are Australia and New Zealand (embryos only).

Scrapie has never occurred in our neighbouring countries (viz Namibia, Zimbabwe, Botswana, Lesotho and Swaziland) who follow the same strict import requirements as South Africa. As Scrapie is regarded as an exotic disease to Southern Africa, a policy of stamping out and total depopulation would be followed in these countries, should it be introduced.

In our strive to uphold Scrapie freedom status, ongoing active and passive surveillance are maintained.

Active surveillance:

Government subsidised veterinary diagnostics are the responsibility of the Onderstepoort Veterinary Institute (OVI) which falls under the Agricultural Research Council (ARC) and 14 veterinary laboratories which fall under the Department of Agriculture (Directorate of Animal Health). If a notifiable or exotic disease is diagnosed, it is immediately reported to the local State Veterinarian.

Dr L Prozesky, head of the Diagnostic Programme (biggest program within the ARC) at the OVI, reported that no suspect or positive cases of Scrapie have been diagnosed at OVI since the last outbreak in 1972.

The OVI is constantly monitoring the national disease status in the country. Currently, all brain samples of food animals submitted to the OVI for Rabies and those which are negative on the fluorescent antibody test, are examined histopathologically. This is one of the precautions taken to assure that the country is free from Bovine Spongiform encephalopathy (BSE) and other conditions, including Scrapie.

As conditions (eg Heartwater, Rabies, poisonous plants) where nervous symptoms are encountered, are quite prevalent in South Africa, examination of brain tissue is done regularly at all Veterinary diagnostic labs throughout the country.

Appendix 1: Necropsies and microscopic examinations on sheep and goats in RSA 1984-1994 (see attached).

The tables in Appendix I indicate the number of necropsies on sheep and goats and the number of brains examined at the various laboratories. (OVI and government controlled veterinary laboratories situated in the regions). (See map of laboratories)

The figures indicate detailed post mortem examinations done on sheep and goats for the past ten years, as well as microscopic brain examination-figures and cases showing symptoms involving the central nervous system.

In most instances, where no definite diagnosis could be made on macroscopic examination, histopathology on brain tissue was always included in the microscopic examination. However, in every case showing symptoms involving the CNS, microscopic examination of brain tissue was done. Where labs were not equipped to do histopathology, specimens were sent to Onderstepoort Veterinary Institute for further examination and testing.

From the records available, a total of 25759 sheep and goats were necropsied over the 10 year period. A minimum of 5855 histopathological examinations (done at various laboratories and those submitted to OVI) on a total number of 10664 necropsies (excluding labs 3, 4, 9 and 15 ie where histology was done at OVI), totalling 55% were done, without ever diagnosing Scrapie. Practically 95% of the 5855 would have shown nervous symptoms. (Heartwater and plant poisons are most common causes). It can safely be said that all animals (100%) showing nervous symptoms had a microscopic brain examination done - eg for labs 1, 6, 7, 8, 10, 11, 12, 14 where total figures could be obtained the total brains examined amounted to 2346, which is 115% of the total animals (2046) showing clinical nervous symptoms.

It was unfortunately not possible to obtain ages of the animals post mortem, but it would be in the region of $\pm 50\% < 2$ years and $\pm 50\% > 2$ years of age.

The figures demonstrate a high necropsy level, where nervous symptoms are quite prevalent, but where no Scrapie had been diagnosed. The sheep and goat population in the RSA is 32 million.

Passive surveillance:

The control of animal diseases and eradication of foreign and erosion diseases, are chiefly the responsibility of the Directorate of Animal Health in the Department of Agriculture. The Directorate is presently divided into 7 regions, each with a Regional Director and approximately 10 state veterinarians, strategically placed within each region to serve about 5 to 10 districts each. Every State Veterinarian has technical personnel (3 year diploma course and in-service training) in the field responsible for inspections, collection of specimens, regulatory aspects (movement control, import control, quarantine, border control), extension to stock owners, census figures, surveys etc. They are the eyes and ears of the State Veterinarian and depending on the area of control, visits to farms vary from weekly (FMD control area) to twice a year.

Regular inspections (passive surveillance) for diseases (foreign and known) occurring on any farm is done by these highly trained technicians. Special attention is given to post quarantine observation of imported animals and products.

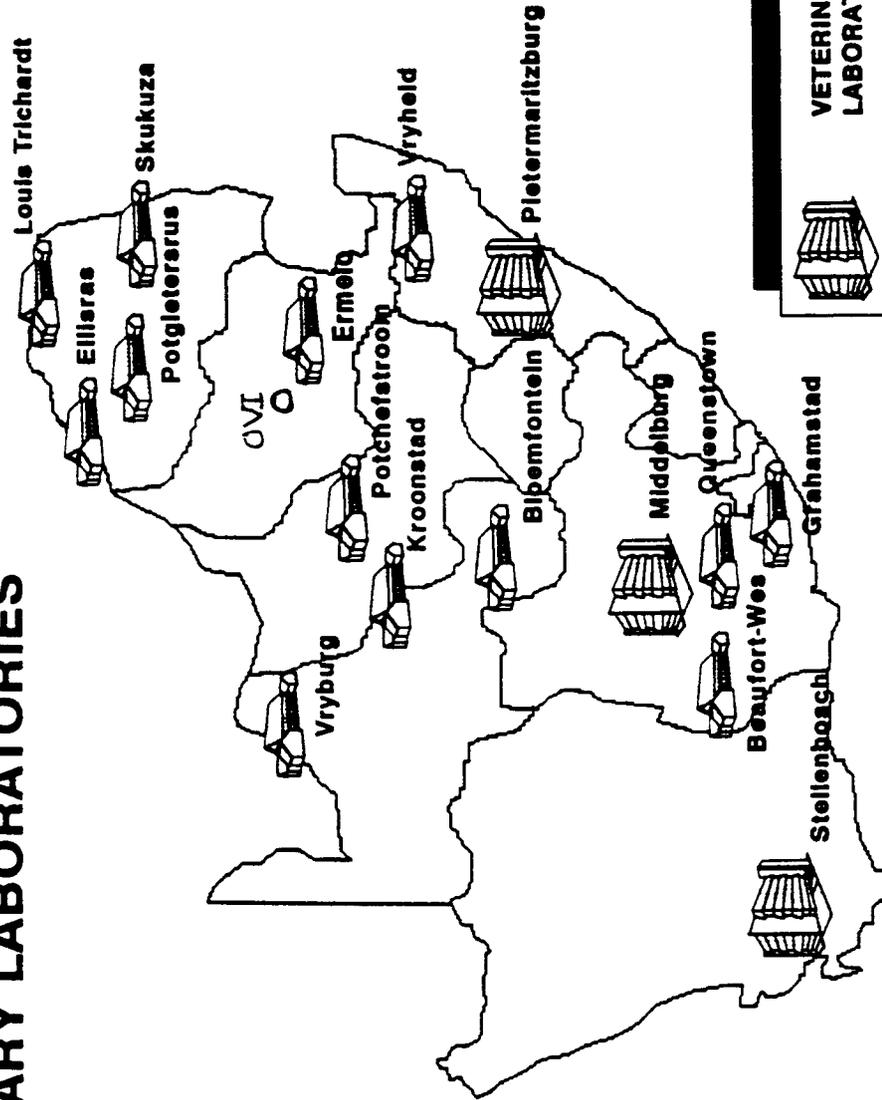
In view of the above it can be stated that South Africa is free from Scrapie. Animals should therefore not be required to enter into any post-importation Scrapie control programme, when imported into the USA.

Other countries, notably Canada, have accepted our Scrapie freedom status and I am looking forward to a favourable outcome of our request. Thank you very much for your consideration.

Yours sincerely


 (DIRECTOR OF ANIMAL HEALTH

DIRECTORATE OF ANIMAL HEALTH VETERINARY LABORATORIES



	VETERINARY REGIONAL LABORATORIES
	VETERINARY LABORATORIES

OVI ONDERSTE POORT VET INST.

Appendix 1: Necropsies and microscopic examinations done in RSA on sheep and goats 1984-1994

The following are the schedules as supplied by the various diagnostic veterinary laboratories of the Department Agriculture (Animal Health) throughout South Africa, on sheep and goat necropsies, with particular reference to Scrapie.

The following figures are given per column:

1. Number of full necropsies performed on sheep and goats (macroscopic brain examination).
2. Number of cases showing central nervous system symptoms.
3. Microscopic brain examinations.
4. Percentage of total necropsies showing nervous symptoms (2/1).
5. Percentage microscopic brain examinations on cases showing clinical nervous symptoms (3/2).
6. Percentage microscopic brain examinations on all post mortems performed (3/1).

The laboratories are listed no. 1 to 15. Comments of interest or importance are indicated as well.

No Scrapie or BSE has been diagnosed since 1972, when the introduced Scrapie (imported animals) was eradicated.

Lab no.	Laboratory	1	2	3	4 %	5 %	6 %	Remarks
1.	Potgietersrust	1545	543	502	35	91	32	
2.	Allerton	1823	not available	712	-	39	-	figures for 9 years only
3.	Middelburg CP	3913	225	Submitted to OVI	6	100	6	
4.	Kroonstad	574 + ?	not available	Submitted to OVI	-	-	-	
5.	Stellenbosch	2134	not available	1379	-	100	73	
6.	Bloemfontein	1063	82	321	77	391	30	
7.	Ermelo	1340	185	185	14	100	14	
8.	Grahamstown	713	706	713	99	100	100	
9.	Potchefstroom	1153	15	Submitted to OVI	1	-	-	
10.	Ellisras	103	40	79	-	39	77	figures for 2 years only
11.	Vryheid	316	45	45	14	100	100	figures for 4 years only
12.	Louis Trichardt	433	326	411	75	126	95	
13.	Beaufort West	296	12	12	4	100	4	
14.	Queenstown	898	107	78	12	73	9	
15.	OVI	9455	estim. 15% (1418)	estim. 15% (1418)	15	100	15	see OVI schedule
15 Labs Total		25759 (total 10664 excl. labs 3,4,9 +15)	2046 (excl. labs 2,3,4,5,9+15)	5855 (excl. labs 3,4,9) 2346 (excl. labs 2,3,4,5,9+15)		<u>2046</u> 2346 = 115%	<u>5855</u> 10664 = 55%	

3 MIDDELBURG C.P.

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	312	318	355	258	466	860	350	339	353	302	3913
2	17	14	18	22	14	22	21	52	28	17	225
3	17	14	18	22	14	22	21	52	28	17	225 ¹
4 %	5	4	5	9	3	3	6	15	8	6	6%
5 %	5	100	100	100	100	100	100	100	100	100	100%
6 %	100	4	5	9	3	3	6	15	8	8	6%

1. Submitted to OVI

4 KROONSTAD

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	71	102	90	111	?	73	79	?	?	48	574 + ?
2	not available										
3	not available										
4 %	cannot be processed										
5 %	cannot be processed										
6 %	cannot be processed										

5 STELLENBOSCH

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	174	200	157	203	235	289	253	204	213	206	1899 ¹
2	not available										
3	77	118	121	135	175	206	158	111	138	140	1379 ²
4 %	Lots of plant poisons causing nervous symptoms										
5 %	cannot be processed										
6 %	44	59	77	67	74	71	62	54	65	68	100%
	100% with clinical CNS symptoms have been examined										
	73% ³										

1 Necropsies done at the laboratory itself (1899)

2 Total of 1379 also include samples submitted by private veterinarians (not detailed)

3 This figure is not correct, as the number of necropsies done by private veterinarians are not included in column 1, but samples submitted and examined are included in column 3.

6 BLOEMFONTEIN

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	110	112	121	118	132	167	85	79	64	75	1063
2	14	16	2	-	9	15	9	2	6	9	82
3	27	20	36	52	57	34	33	21	17	24	321
4 %	13	14	2	0	7	9	11	3	9	12	77%
5 %	193	125	1800	-	633	227	366	1050	283	267	391%
6 %	25	18	30	44	43	20	39	27	26	32	30%

7 ERMELO

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	14	69	82	84	128	131	174	136	236	286	1340
2	2	6	11	16	24	26	19	28	17	36	185
3	2	6	11	16	24	26	19	28	17	36	185
4 %	14	9	13	19	19	20	11	21	7	13	14%
5 %	100	100	100	100	100	100	100	100	100	100	100%
6 %	14	9	13	19	19	20	11	21	7	13	14%

8 GRAHAMSTOWN

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1			2	7	146	130	42	160	87	139	713
2			2	2	145	130	40	157	86	139	706
3			2	7	146	130	42	160	87	139	713
4 %			100	29	99	100	95	98	99	100	99%
5 %	all brains examined microscopically										
6 %	all brains examined microscopically										
	100%										

9 POTCHEFSTROOM

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	93	70	80	135	196	132	46	137	143	121	1153
2	not available										
3	sent to OVI maximum 15										
4%	cannot be processed										
5%	cannot be processed										
6%	cannot be processed										
	1%										

10 ELLISRAS (LABORATORY IN EXISTENCE FOR 2 YEARS ONLY)

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1									82	21	103
2									32	8	40
3	microscopic brain examinations are done on all post mortems with history of nervous symptoms and on all other carcasses where a definite diagnosis cannot be made										
4%									39	38	39%
5%	Microscopic brain examination is done on all post mortems where no diagnosis can be made macroscopically										
6%									71	100	77%

11 VRYHEID (LABORATORY IN EXISTENCE FOR 4 YEARS ONLY)

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1							79	85	97	55	316
2							4	14	18	9	45
3							4	14	18	9	45
4 %							5	16	19	16	14
microscopic brain examination done on all post mortems performed (because of Hearwater prevalence)											
5 %							100	100	100	100	100%
6 %							79	85	97	55	100% of all pms done

12 LOUIS TRICHARDT

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	29	18	19	87	47	60	54	39	37	44	433
2	26	14	12	54	38	52	32	36	27	35	326
3	29	15	19	84	45	60	46	35	35	43	411
4 %	90	78	63	62	81	87	59	90	95	98	75%
5 %	115	107	158	156	118	115	143	97	130	123	126%
6 %	100	83	100	97	96	100	85	90	95	98	95%

13 BEAUFORT WEST

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	39	47	41	68	14	22	16	24	12	13	296
2	1	2	5	2	-	-	1	-	-	1	12
3	1	2	5	2	-	-	1	-	-	1	12
4 %	2	4	12	3	0	0	6	0	0	8	4%
5 %	100	100% of animals showing clinical nervous symptoms had microscopic brain examination									
6 %	2	4	12	3	0	0	6	0	0	8	4%

14 QUEENSTOWN

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1	70	143	193	117	132	91	21	37	63	31	898
2	8	18	15	26	12	4	4	6	5	9	107
3	5	16	13	20	6	2	1	5	2	8	78
4 %	11	13	8	20	9	4	19	16	8	29	12%
5 %	63	89	87	77	50	50	25	83	40	89	73%
6 %	7	11	7	17	5	2	4	14	3	26	9%

15 ONDERSTEPOORT VETERINARY INSTITUTE

	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	TOTAL
1		not available		1088	1114	915	1200	1415	2652	1071	9455
2	not available on all animals showing nervous symptoms ($\pm 15\%$) a brain histopath examination is done										
3	see above on all ruminant brains, sent into the OVI for rabies testing, and found negative on fluorescent antibody test for Rabies, are histopathologically screened for BSE and Scrapie No separate figures available for animals necropsied at OVI and examinations on specimens sent in from cases in the field (mostly sent in from field).										
4	cannot be processed										
5	cannot be processed										
6	cannot be processed										