Western Cape Government
FOR YOU

VETERINARY LABORATORY SERVICES
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LABORATORY REPORT
Submission No: S2025/09_0551

Sender:	Dr Dorothy Breed	**Owner:**	Wild animal (see Sender Reference)
Clinic or Company:	City of Cape Town Biodiversity Management	**Company:**	-
		Farm Name (GPS):	- (-,-)
PO Box or Street:	1st floor Old Abbattoir Building, 53 Berkley Road	**Street address:**	-
		PO Box address:	-
Town, postal code:	Maitland, 6505	**Town, postal code:**	-, -
Contact number(s):	021441765; 021447319, 0828558378	**Contact number(s):**	-; -
Email:	dorothy.breed@capetown.gov.za	**Email:**	-

Sender Reference: City of Cape Town Biodiversity Management_INSP221047

State Vet Area: Contact Sender for SV details **Purpose of sampling:** Diagnostic

SPECIMEN INFORMATION

Species: Other
Date & Time Received: 30-09-2025 12:09:27

REPORT / VERSLAG

REPORT / VERSLAG

POST MORTEM REPORT

Submission date: 30/09/2025

Post mortem date: 01/10/2025

Submission number: S2025/09_0551

History: "17 September 2025, Atlantis Dunes Conservation Area - Nature Conservation staff apprehended a suspect trespassing with 9 protected tortoises. The suspect threatened officials with a knife and was restrained until SAPS arrived. Animals were confiscated; several were found dead at the scene and all tortoises were taken by Cape of Good Hope **SPCA Case Reference: INSP221047.**

Request full post mortems on deceased tortoises to determine cause of death. Case handed to **Atlantis SAPS. Ref: OB 768/09/2025; SAP14 257/09/2025; SAP14A S5684797.**"

Samples received and tests requested: Four Angulate tortoises were submitted for post mortem examination. According to the inspector that submitted them, two were already dead at the time the animals were confiscated. The other two died approximately a week later and were subsequently frozen before being submitted. These two "groups" were submitted in separate bags (triple bagged in both groups).

- *Two tortoises that were indicated to be those that were found dead on 17 September:*
  Carcasses not cold to the touch when received.
  Numerous live and actively moving large fly larvae (maggots) were present in the second bag (likely crawled out of bag containing carcasses into the next bag).
  Both tortoises in the deepest bag were severely decomposed - autolysis and putrefaction, with sloughing of the epidermal scutes (superficial layer of shell) and skin on legs and skull, with bones visible underneath, grey to black discolouration of all organs (pseudomelanosis), seepage of brownish-black fluid from the carcasses, partial loss/loos ening of organ attachment to the shell, with live maggots also present within these remaining decomposed tissues of the carcasses.
  **These two carcasses were too autolysed for post mortem examination.

- *Two tortoises that were indicated as those that had died approximately one week later:*
  Carcasses cold to the touch when received. Placed in Post mortem section fridge overnight for post mortem examination on 01/10/2025.

Animal identification:
One male (approx. 195 x 107 x 79 mm) and one female (approx. 145 x 96 x 65 mm), both marked with a white "A" on the caudal shell, along midline, just above the edge of the dorsal shell (carapace).

PM changes:
Male tortoise: Moderate to advanced autolysis. Some fly eggs present in left eye socket.
Female tortoise: Advanced autolysis. Fly eggs present on skin at the tail base/right hind limb hip region.

Generalised changes:
Both tortoises:
No visible fat in mesentery, surrounding viscera, or in form of fat body - significance unknown (it is unclear what normal fat amount and distribution is in this species)

Specific changes:
Both tortoises:
Moderate to advanced autolysis made it difficult to determine whether lesions were present.
No macroscopically visible lesions observed.
Single Argasid (hard) ticks observed, attached at the junction of the plastron (shell ventral to body) and the hind limbs.
Numerous small white nematode worms present, admixed with digesta in the colon.

REPORT / VERSLAG

Male tortoise:
Small amount of uric acid accumulation in the urodeum/cloaca - significance unknown.

Samples taken at necropsy: An organ pool of samples for histopathology. Faeces for parasitology. Liver and spleen from the less autolysed male tortoise, for bacterial culture.

RESULTS:

Histopathology:
Moderate to advanced autolysis and freezing artefacts impeded histological evaluation and interpretation significantly, especially in the female tortoise. No histologically significant changes observed in examined sections of the liver, spleen, kidneys, heart, primary bronchi, lungs, brain, testes (male), oesophagus, skin, skeletal muscle and oviduct (female), where these organs could be identified as such histologically (due to advanced autolysis).
The intestinal tract of both the male and female were too autolysed to evaluate histologically, but numerous cross-secti ons and oblique sections through nematode worms were present in the lumen.

Bacteriology:
A heavy mixed growth of *Proteus* sp. was isolated from the liver and spleen of the male tortoise. Other bacteria could also be observed, but due to the swarming nature of *Proteus* sp., they could not be identified.
No anaerobic growth observed.
Salmonella spp. isolated from the liver.

Parasitology:
Two types of large nematode eggs seen (4+)
Smaller eggs (1+)
Coccidia (1+)
(No reference available to identify tortoise worm eggs more specifically).

High number of immature and adult worms seen.

COMMENTS/DIAGNOSIS:
No diagnosis possible.

The cause of death was not evident in either of the two tortoises. Variably advanced autolysis and freezing artefacts made interpretation of histological changes difficult, but no evidence was observed of any inflammatory, infectious, necrotising or neoplastic conditions in organs that be histologically identified. Even though no clear adipose tissue (fat) was observed macroscopically or histologically, the significance of this is unclear, as normal fat reserves for the species is not reported and advanced autolysis also affected tissues.

An overgrowth of *Proteus* sp. bacteria isolated from the liver and spleen is most likely post mortem proliferation and translocation, as these organisms are part of the normal flora in the intestines and are frequently isolated in markedly autolysed carcasses. Given the degree of autolysis, presence of post mortem bacteria and the lack of histologically significant lesions, the isolated *Salmonella* sp. is likely also incidental, and a result of post mortem translocation from the intestinal tract, where it is a normal part of the gut flora.

Internal parasites (worms) are commonly seen in high numbers in wild reptiles, but few are significant pathogens. The observed nematodes in the intestinal tracts in these tortoises were likely incidental in this case.

The first two tortoises were too decomposed for meaningful evaluation and at that stage of decomposition, histopathology and other further testing would not be of any diagnostic value. Therefore, no further investigation occurred in these two carcasses.

REMARKS:

Four tortoises submitted. Post mortems performed on only two, due to advanced decomposition in the other two.

Thank you for submitting these samples to the Western Cape Provincial Veterinary Laboratory. Please do not hesitate to contact us should you have any queries.

State Veterinarian

Dr A Avenant

Name

Signature

Report date

DR. ALIDA AVENANT
BVSc, Msc, MMedVet (Pathology)
SAVC Reg: S21/11077

23 OCT 2025

DEPT. OF AGRICULTURE: WESTERN CAPE
PRIVATE BAG X5020 STELLENBOSCH, 7599
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LABORATORY REPORT FOR POST-MORTEM (NECROPSY) INVESTIGATION

Submission No: S2025/09_0551

Sender:	Dr Dorothy Breed	**Owner:**	Wild animal (see Sender Reference)
Clinic or Company:	City of Cape Town Biodiversity Management	**Company:**	-
		Farm Name (GPS):	- (-,-)
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Email:	dorothy.breed@capetown.gov.za	**Email:**	-

Sender Reference: City of Cape Town Biodiversity Management_INSP221047

State Vet Area: Contact Sender for SV details **Purpose of sampling:** Diagnostic

SPECIMEN INFORMATION

Species: Other
Specimen condition: Suitable
Client sampling date, if indicated: 17-09-2025
Date & time received for post-mortem investigation: 30-09-2025 12:09:27
Post-mortem examination date: 01-10-2025

Specimens taken at necropsy:

Specimen Type	Quantity	Test(s) Required
Tissue / Organs, in formalin	1	Haematoxylin and Eosin (H&E) Staining Test (P-HIST-M-006)

Specimen Type: Tissue / Organs, in formalin

Test: Haematoxylin and Eosin (H&E) Staining Test

Staining date	16-10-2025
Histopathology service requested	Processing, staining and examination (Refer to attached report for histopathology findings)
Comments	No additional comments

NOTE: Opinions and interpretations expressed herein are outside the scope of SANAS accreditation.

Thank you for submitting these samples to the Western Cape Provincial Veterinary Laboratory. Please do not hesitate to contact us should you have any queries.

Authorised signatory

EC de Mon
Initial and surname

Signature

16/10/2025
Report Date

State Veterinarian

Dr A Avenant
Initial and surname

Signature

22/10/2025
Date

HISTOLOGY Reference No.: 25,327