

Algal bloom wildlife post-mortem report



Government
of South Australia

Department for
Environment and Water

Species – Shy albatross

Date collected – 15 March 2026

Location – Lincoln Highway, Port Lincoln.

History relating to the animal

An adult shy albatross (*Thalassarche cauta*) was found dead and collected from Port Lincoln on 15 March 2026. The bird was collected and stored frozen and subsequently submitted for laboratory examination on 20 March 2026.

Clinical examination

The bird was already dead and so could not be examined prior to death.

Necropsy

The albatross was in poor body condition and weighed 3.6 kg. There was atrophy of both pectoral muscles (chest muscles used for flight). There was moderate freeze artefact (changes to the tissues from being frozen) and postmortem autolytic changes (decomposition after death). There was no ingesta (food material) in the gut. The spleen was missing.

Tissues were collected for histopathology (looking at tissues under the microscope for more detailed information) and testing for brevetoxins and other algal biotoxins (a possibility due to the algal bloom).

Histopathology

Samples from every major body system were examined under the microscope. There was freeze artifact (changes to tissues from being frozen) and autolytic changes (decomposition after death) in all tissues. There were no other significant findings (evidence of disease processes).

Brevetoxins

No samples were above the limits of reporting.

Other algal biotoxins

No samples were above the limits of reporting.

Algal bloom wildlife post-mortem report



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Summary

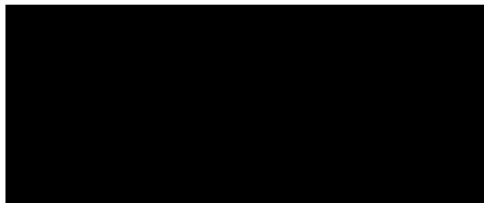
An adult shy albatross was found dead. Laboratory examination revealed the animal had long-term weight loss, but the cause of weight loss and death could not be determined. It is suspected that poor nutrition contributed to the animal's weakened condition, possibly due to reduced food availability in the environment, although this could not be confirmed. Brevetoxins and other algal biotoxins were not detected.

PATH RESULTS: ALBATROSS, (Wi) [REDACTED]

From [REDACTED]

Date Fri 20/03/2026 1:30 PM

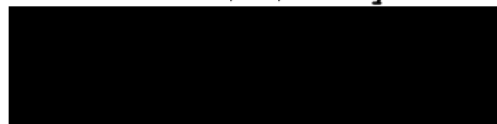
To [REDACTED]



Report Addressee:



Tested on 20/03/26
Reported on 20/03/26 14:00
Referred on 15/03/26 **by:**



Owner:

ALBATROSS
41-57 LINCOLN HWY
PORT LINCOLN 5606

Animal/s:

Wild Birds

DOB: N/A

Collected: 15/03/26 00:25

Subm.No: [REDACTED]

Lab No.: [REDACTED]

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

This is a summary of the clinical history from the request form. Please refer to the request form for the full clinical history.

The show our trust was found dead on 15th March 2026 at 41-57 Lincoln Highway Boston Port Lincoln. The bird was frozen by Dept E and W SA ranger.

SAMPLES SUBMITTED

1 dead adult shy albatross, *Thalassarche cauta*

NECROPSY FINDINGS

There are moderate freeze artefact and post mortem autolytic changes. The bird is in poor body condition, there is atrophy of both pectoral muscles and the bird weighs 3.6 kg.

There is no ingesta in the alimentary tract.

GROSS SUMMARY

Chronic weight loss

SAMPLES COLLECTED & TESTING

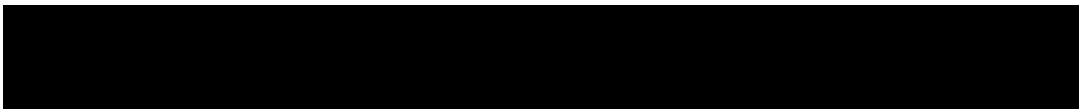
Formalin-fixed tissues will be processed for histopathology.

A quote for biotoxin (including paralytic shellfish toxin, lipophilic toxins and brevetoxins) on liver, heart, lung, kidney, brain will be requested from Analytical Services Tasmania. The quote will be sent to you for approval. No spleen was evident in the bird.

Fresh liver, heart, lung, kidney, brain and cloacal and tracheal swabs in virus transport medium are stored.

COMMENTS

The cause of chronic weight loss and death are not found based on necropsy findings. Could decreased feed abundance associated with the variable *Karenia* sp. algal bloom be a contributing factor to the bird's weight loss ?





Report Addressee:



Tested on 20/03/26
Reported on 20/03/26 14:00
Referred on 15/03/26 by:



Owner:
ALBATROSS
41-57 LINCOLN HWY
PORT LINCOLN 5606

Animal/s:
Wild Birds

DOB: N/A

Collected: 15/03/26 00:25 Subm.No: [REDACTED] Lab No.: [REDACTED]

Samples tested as received

Specialist Veterinary Anatomic Pathologist



Validated by [REDACTED]

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PATH RESULTS: ALBATROSS, (Wi) [REDACTED]

From [REDACTED]

Date Thu 26/03/2026 1:30 PM

To [REDACTED]

[REDACTED]

Report Addressee:

Tested on 20/03/26
Reported on 26/03/26 14:00
Referred on 15/03/26 **by:**

Owner:
ALBATROSS
41-57 LINCOLN HWY
PORT LINCOLN 5606

Animal/s:
Wild Birds

DOB: N/A

Collected: 15/03/26 00:25

Subm.No: [REDACTED]

Lab No.: [REDACTED]

Samples tested as received

All Tests Complete

HISTOPATHOLOGY

REF: [REDACTED]

CLINICAL HISTORY

Shy Albatross reported by MOP as dead on March 15 at 41-57 Lincoln Highway Boston, Port Lincoln SA 5607, Australia.
DEW Ranger has collected on March 15 and frozen bird. Bird being delivered in refrigerated truck to [REDACTED] due to arrive on March 20.

MACROSCOPY

Pot received labelled [REDACTED] abd organs listed below.
A = muscle + heart + lung + kidney + liver
B = ventriculus, duodenum, jejunum
C - E = brain
Ed

Please note, spleen was not evident on necropsy.

MICROSCOPY

There are freeze artifact and autolytic changes in all tissues. Aside from this artifact there are no other significant findings.

DIAGNOSIS

Unremarkable histological findings

COMMENTS

There are no significant histological findings to explain the cause of weight loss or death.

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by

[REDACTED]

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CERTIFICATE OF ANALYSIS

Customer:

Address:

Contact:

Submission Description:

Sample Received Date:

Contract Number:

Client Order Number:

Program/Quote Reference:

Avian

01/05/2026

Biotoxin and Brevotoxins

Sample(s) analysed as received. Sampling date and time data supplied by the client. The document shall not be reproduced except in full.

Additional information relating to this submission can be found in the sample receipt notification.

This report supersedes any previous reports with this submission number.

Many tests specify a holding time which gives the recommended timeframe by which a sample should be preserved/extracted and/or analysed after the sample is taken.

Holding time information can be found on the AST website <https://analyticalservices.tas.gov.au/our-services/containers-samples-and-submissions>.

Whilst every effort is made to analyse samples within these timeframes, situations can occur where this is not possible.

Where a test has been conducted outside the recommended sample holding time this should be taken into account when interpreting results.

The results in this report were authorised by:

Name

Position

Section Head - Organic
Chemistry

Test Information:

Method ID

Test Description

Date Commenced:

3411

Lipophilic Toxins in Shellfish by LC-MS/MS

25-05-2026

3411A

Brevetoxins in Shellfish by LC-MS/MS

15-05-2026

3416

PST in Biota by LC-MS/MS (Boundy Method)

25-05-2026

Chemistry Test Results (Biota - Food)			Sample Description	Liver	Heart	Lung	Kidney	Brain
			Sampled Date/ Time	20/03/26 0:00	20/03/26 0:00	20/03/26 0:00	20/03/26 0:00	20/03/26 0:00
Method ID	Analyte	Units		464919	464920	464921	464922	464923
3411	AZA1	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	AZA2	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	AZA3	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	Domoic Acid	mg/kg WMB		<0.05*	<0.05*	<0.05*	<0.05*	<0.05*
	DTX1 Free	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	DTX1 Total	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	DTX2 Free	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	DTX2 Total	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	GYM	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	Homo-YTX	mg/kg WMB		<0.02*	<0.02*	<0.02*	<0.02*	<0.02*
	OA Free	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	OA Total	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	PnTx-G	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	PTX2	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	SPX1	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	Total DST	OA eq. mg/kg		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	YTX	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
3411A	Brevetoxin 1	mg/kg WMB		<0.10*	<0.10*	<0.10*	<0.10*	<0.10*
	Brevetoxin 2	mg/kg WMB		<0.02*	<0.02*	<0.02*	<0.02*	<0.02*
	Brevetoxin 3	mg/kg WMB		<0.02*	<0.02*	<0.02*	<0.02*	<0.02*
3416	C1	STX.2HCl eq. mg/kg		<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	C2	STX.2HCl eq. mg/kg		<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	C3	STX.2HCl eq. mg/kg		<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	C4	STX.2HCl eq. mg/kg		<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	dcGTX1	STX.2HCl eq. mg/kg		<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	dcGTX2	STX.2HCl eq. mg/kg		<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	dcGTX3	STX.2HCl eq. mg/kg		<0.02*	<0.02*	*IS*	<0.02*	<0.02*

IS- Insufficient Sample

* NATA accreditation does not cover this result

Chemistry Test Results (Biota - Food)

Sample Description			Liver	Heart	Lung	Kidney	Brain
Sampled Date/ Time			20/03/26 0:00	20/03/26 0:00	20/03/26 0:00	20/03/26 0:00	20/03/26 0:00
Method ID	Analyte	Units	464919	464920	464921	464922	464923
3416	dcGTX4	STX.2HCl eq. mg/kg	<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	dcNEO	STX.2HCl eq. mg/kg	<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	dcSTX	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	doSTX	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	GTX1	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	GTX2	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	GTX3	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	GTX4	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	GTX5	STX.2HCl eq. mg/kg	<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	GTX6	STX.2HCl eq. mg/kg	<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	NEO	STX.2HCl eq. mg/kg	<0.02*	<0.02*	*IS*	<0.02*	<0.02*
	STX	STX.2HCl eq. mg/kg	<0.01*	<0.01*	*IS*	<0.01*	<0.01*
	Total PST	STX.2HCl eq. mg/kg	<0.10*	<0.10*	*IS*	<0.10*	<0.10*

IS- Insufficient Sample

* NATA accreditation does not cover this result