

# Algal bloom wildlife post-mortem report



Government of South Australia

Department for Environment and Water

## Species – Cormorants

Date collected – 22 April 2025

Location – Outer Harbour boat ramp, Adelaide

## History relating to the animal

Approximately 30 dead cormorants (*Phalacrocorax spp.*) washed up at the boat ramp at Outer Harbour on 22 April 2025. Ten (10) of these young birds (fledgeling and juveniles) were submitted for laboratory examination.

## Clinical examination

The birds were already dead and so could not be examined prior to death.

## Necropsy

The necropsy (looking at the whole body) revealed that these birds were in moderate body condition. The weights of the fledgelings ranged between 200g – 300g, and the juvenile birds between 400g – 1kg. There was marked putrefactive post-mortem autolytic change (decomposing after death). There was food material and low to moderate numbers of ascarid worms (gut parasites) within the proventriculus and ventriculus (parts of the gut, similar to the stomach of other animals).

Samples were collected to test for avian influenza and Newcastle disease. Tissue samples were collected and stored from birds with intact organs, however further testing was not indicated in this case.

## Virology

Testing results for avian influenza and Newcastle disease were negative.

## Summary

Approximately 30 dead cormorants were found dead at Outer Harbour. Ten young birds of the group were submitted for testing. Laboratory examination could not identify the cause of death. There are no findings consistent with trauma (such as broken bones or bleeding) or chronic (long-term) illness or weight loss. Ascarids (worms) were found within the proventriculus (upper part of the gut), which is a common finding in marine birds. The food material found within the upper gut confirms recent feeding, indicating that their deaths were acute (sudden/quick). Testing for avian influenza and Newcastle disease was negative.

**From:** [REDACTED]  
**Sent:** Wednesday, 13 August 2025 5:00 PM  
**To:** [REDACTED]  
**Subject:** PATH RESULTS: CORMORANT MORTALITY, (Wi) [REDACTED]

GRIBBLES VETERINARY PATHOLOGY

Tested on 22/04/25  
Reported on 13/08/25 17:30  
Referred on 22/04/25 by: [REDACTED]

**Owner:** CORMORANT MORTALITY  
Outer Harbor 5018

**Animal/s:** Wild Birds  
**DOB:** N/A

**Collected:** 22/04/25 12:00 **Subm.No.:** [REDACTED]

**Lab No.:** [REDACTED]

**Samples tested as received**

All Tests Complete

**SUMMARY DIAGNOSIS**  
No diagnosis is concluded

**SUMMARY COMMENTS**  
There are no laboratory findings to explain the cause of death. AI and Newcastle disease virus are excluded based on the negative qPCR results. There are no findings consistent with trauma (e.g. fractured bones / blood clots). The ascarids in their proventriculus are a normal finding in marine birds.

[REDACTED]  
Specialist Veterinary Anatomic Pathologist

Validated by [REDACTED]

GRIBBLES VETERINARY PATHOLOGY

[REDACTED]

[REDACTED]

Tested on 22/04/25  
Reported on 13/08/25 17:30  
Referred on 22/04/25 by:  
[REDACTED]

Owner:  
CORMORANT MORTALITY  
OUTER HARBOR 5018

Animal/s:  
Wild Birds  
DOB: N/A

Collected: 22/04/25 12:00 Subm.No: [REDACTED]

Lab No.: [REDACTED]

Samples tested as received

All Tests Complete

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Approximately 30 dead cormorants were washed up at the boat ramp and at Harbor may be able bloom associated or carbon monoxide poisoning-discharge from ships.

SAMPLES SUBMITTED

10 dead fledgling and juvenile cormorants (Phalacrocorax sp.)

NECROPSY FINDINGS

The birds are in moderate body condition. There is marked autolysis of all birds. All birds contain ingesta within the proventriculus/ventriculus. Admixed with the ingesta are low to moderate numbers of ascarid worms varying from 20 to 50mm in length.

Additional findings

Birds are allocated numbers at the laboratory

Birds 1, 6, 7

These fledglings with few feathers weigh 200g

Birds 2, 8

These fledglings with few feathers weigh 300g

Birds 3, 9

These juveniles, birds 3 and 9 weigh 400g and 600g respectively.

Birds 4, 5 and 10

These juveniles, birds 4, 5 and 10 weigh 800g, 1kg and 800g respectively.

#### GROSS SUMMARY

Unremarkable gross findings

#### SAMPLES COLLECTED & TESTING

Cloacal and tracheal swabs are taken from birds from each representative age , birds 1-5, for AI and NDV qPCR testing.

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[REDACTED]

Owner:  
CORMORANT MORTALITY  
OUTER HARBOR 5018

Animal/s:  
Wild Birds  
DOB: N/A

Collected: 22/04/25 12:00 Subm.No: [REDACTED]

Lab No.: [REDACTED]

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**Samples tested as received** All Tests Complete  
Formalin fixed tissues and fresh tissues (including, liver, spleen, heart, lung, kidney, brain and gizzard content) are taken from the birds which have intact internal organs, that is the autolysis has not compromised the integrity of the organs, birds 4 and 5. The samples are stored. Even for these birds 4 and 5 the autolytic changes are significant and will confound any histological findings. For this reason histopathology is not recommended.

Samples are stored for one month only, in line with the laboratories quality assurance procedures. If no further testing is requested after one month the samples will be discarded.

COMMENTS

There are no gross findings to explain the cause of death. There are no findings consistent with trauma (e.g. fractured bones / blood clots). The birds had recently fed (their proventriculus / ventriculus are full of ingesta) so their deaths were acute. There are no findings consistent with chronic ill thrift.

Only sampling of 5 birds (cloacal and tracheal swabs) and full necropsy of 2 birds will be charged.

[REDACTED]  
Specialist Veterinary Anatomic Pathologist  
[REDACTED]

Validated by [REDACTED]

GRIBBLES VETERINARY PATHOLOGY

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[REDACTED]

Owner:  
CORMORANT MORTALITY  
OUTER HARBOR 5018

Animal/s:  
Wild Birds  
DOB: N/A

Collected: 22/04/25 12:00 Subm.No: [REDACTED] Lab No.: [REDACTED]

Samples tested as received All Tests Complete

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal/  
tracheal swabs Number of specimens: 5

SPECIMEN ID	F Gene	M Gene	L Gene
1	Not detected	Not detected	Not detected
2	Not detected	Not detected	Not detected
3	Not detected	Not detected	Not detected
4	Not detected	Not detected	Not detected
5	Not detected	Not detected	Not detected

Validated by [REDACTED] Laboratory Scientist.

Number of samples 7

**CASE MANAGEMENT DETAILS**

Case Managed by: [REDACTED]

Case Management Requested by: [REDACTED]

Case Management Requested on: 23/04/25

Case Details: 30 dead cormorants found at boat ramp at Outer Harbour

GRIBBLES VETERINARY PATHOLOGY

[REDACTED]

[REDACTED]

Tested on 22/04/25  
Reported on 13/08/25 17:30  
Referred on 22/04/25 by:  
[REDACTED]

Owner:  
CORMORANT MORTALITY  
OUTER HARBOR 5018

Animal/s:  
Wild Birds  
DOB: N/A

Collected: 22/04/25 12:00 Subm.No.: [REDACTED]

Lab No.: [REDACTED]

Samples tested as received

All Tests Complete

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal/tracheal swabs

SPECIMEN ID      Type A                      H5                      H7

1	Not detected
2	Not detected
3	Not detected
4	Not detected
5	Not detected

Validated by [REDACTED] Laboratory Scientist.