

**Institute of Veterinary, Animal and Biomedical Sciences
Massey University**

PATHOLOGY REPORT

Status: Final

Date:

Type: Mortality

Submitter Department of Conservation	Submission Details Lab. Case/Spec ID: 52627 Submitter's Ref: Date Submitted: 10/10/2015 Date Received: 13/10/2015 Previous Case ID: WMD Case/Spec ID: 7546/1
Animal Details Animal ID: Animal Name: S15-13MI Species: <i>Mirounga leonina</i> Common Name: Southern Elephant Seal Sex Class: Male Age Class: Neonate Date Died: 09/10/2015	Epidemiology Number Dead: Number at Risk: Number Sick: Number Submitted: 1

DIAGNOSIS
Starvation.

COMMENTS
This pup was severely underweight for his age. Southern elephant seals should weigh about 40kg at birth and 120kg or more at weaning (approximately 4 weeks of age). The fact that this pup weighed just over half of his likely birthweight suggests that he may never have suckled. This could either be due to a maternal problem (e.g. poor maternal skills in first-time mothers, mastitis) or a pup problem (underlying disease). The mucoid material in the lung could either be fluid that formed around the time of death (which is a common terminal change not associated with disease) or could be pneumonia. Weak neonates often aspirate fluid from their pharynx, causing aspiration pneumonia, which is a consequence of starvation rather than a cause. Histological examination will be conducted to check for this possibility, and to evaluate the other tissues for underlying disease.

ADDENDUM
Microscopic evaluation of sections of lung, liver, kidney, muscle, brain, spleen, lymph node, gastrointestinal tract, adrenal, testis, thyroid, thymus, umbilicus and urachus did not reveal any indication of underlying disease. The fluid in the lungs was mucus without any inflammatory cells.

ANIMAL HISTORY
Born at Caroline Bay on 24 September. Public beach, so was cordoned off for protection. Did not gain weight well. Found dead 9 October.

GROSS PATHOLOGY
This male seal pup was in very poor body condition but a good state of post mortem preservation. The pup weighed 24.0kg. The hair coat was still neonatal (dark brown/black). There were no external wounds. The blubber layer was completely depleted, and subcutaneous tissues were dry and tacky (dehydration). No bruises were present. There was a small (2mm x 0.5mm) superficial ulcer on the inside aspect of the upper lip.

The lungs were bilaterally dark red. Thick mucoid fluid and foam was present in the medium and smaller airways of one lobe. The foramen ovale and ductus arteriosus were patent (normal for this age). The vena cava and renicular vessels were markedly congested. The stomach and oesophagus contained a small amount of watery tan fluid. Similar, slightly more mucoid material was present in small amounts throughout the intestinal tract. No faecal material was present. The umbilicus was well healed and the urachus no longer patent.

HISTOPATHOLOGY

Marked congestion of all examined tissues. No other histological abnormalities detected.