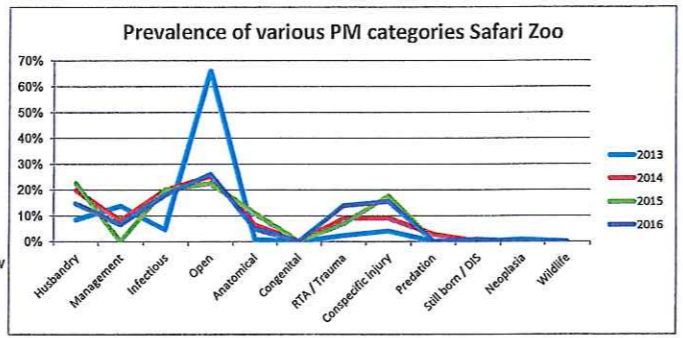


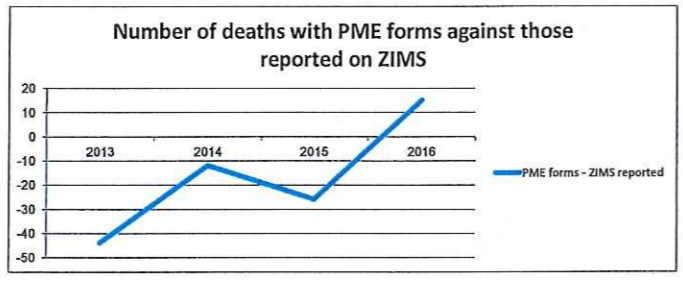
SAFARI ZOO POST MORTEM DATABASE AUDIT 2013 to 2016

| Distribution of mortality categories | 2013<br>% of all cases | 2014<br>% of all cases | 2015<br>% of all cases | 2016<br>% of all cases |
|--------------------------------------|------------------------|------------------------|------------------------|------------------------|
| Husbandry                            | 8%                     | 20%                    | 23%                    | 15%                    |
| Management                           | 14%                    | 8%                     | 0%                     | 7%                     |
| Infectious                           | 5%                     | 20%                    | 20%                    | 18%                    |
| Open                                 | 66%                    | 25%                    | 23%                    | 26%                    |
| Anatomical                           | 1%                     | 6%                     | 11%                    | 5%                     |
| Congenital                           | 0%                     | 0%                     | 0%                     | 0%                     |
| RTA / Trauma                         | 2%                     | 9%                     | 7%                     | 14%                    |
| Conspecific injury                   | 4%                     | 9%                     | 18%                    | 15%                    |
| Predation                            | 0%                     | 3%                     | 0%                     | 0%                     |
| Still born / DIS                     | 0%                     | 0%                     | 0%                     | 1%                     |
| Neoplasia                            | 1%                     | 0%                     | 0%                     | 0%                     |
| Wildlife                             | 0%                     | 0%                     | 0%                     | 0%                     |
| <b>Total</b>                         | <b>100%</b>            | <b>100%</b>            | <b>100%</b>            | <b>100%</b>            |

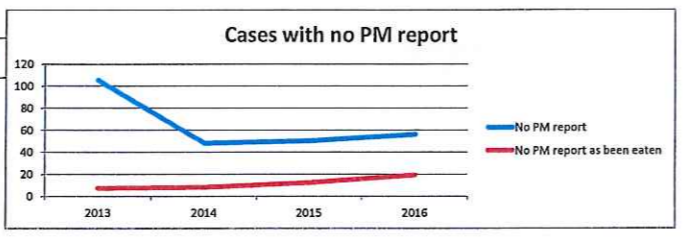


NO PM  
Conspecific injury  
Hypothermia  
Primate  
Macropods  
Psittacine  
Pheasants dat asets

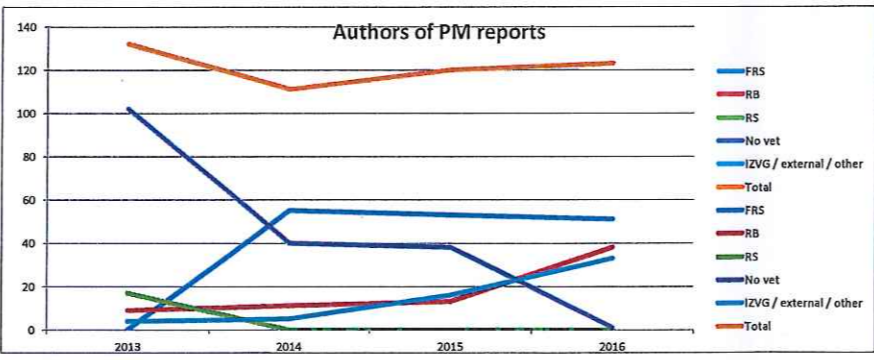
|                    | Number of cases | Number of cases | Number of cases | Number of cases |
|--------------------|-----------------|-----------------|-----------------|-----------------|
| Husbandry          | 11              | 22              | 27              | 18              |
| Management         | 18              | 9               | 0               | 8               |
| Infectious         | 6               | 22              | 24              | 22              |
| Open               | 87              | 28              | 27              | 32              |
| Anatomical         | 1               | 7               | 13              | 6               |
| Congenital         | 0               | 0               | 0               | 0               |
| RTA / Trauma       | 3               | 10              | 8               | 17              |
| Conspecific injury | 5               | 10              | 21              | 19              |
| Predation          | 0               | 3               | 0               | 0               |
| Still born / DIS   | 0               | 0               | 0               | 1               |
| Neoplasia          | 1               | 0               | 0               | 0               |
| Wildlife           | 0               | 0               | 0               | 0               |
| <b>Total</b>       | <b>132</b>      | <b>111</b>      | <b>120</b>      | <b>123</b>      |



|                                 |      |      |      |      |
|---------------------------------|------|------|------|------|
| Total start population          | 1406 | 1584 | 1689 | 1659 |
| Total number of reported deaths | 132  | 111  | 120  | 123  |
| Animal inventory (ZIMS) (total) | 176  | 123  | 146  | 108  |
| Variation                       | -44  | -12  | -26  | 15   |



|  |     |     |     |     |
|--|-----|-----|-----|-----|
| Deaths as % start population           | 9%  | 7%  | 7%  | 7%  |
| Deaths as % start population (no fish) | 16% | 11% | 11% | 11% |

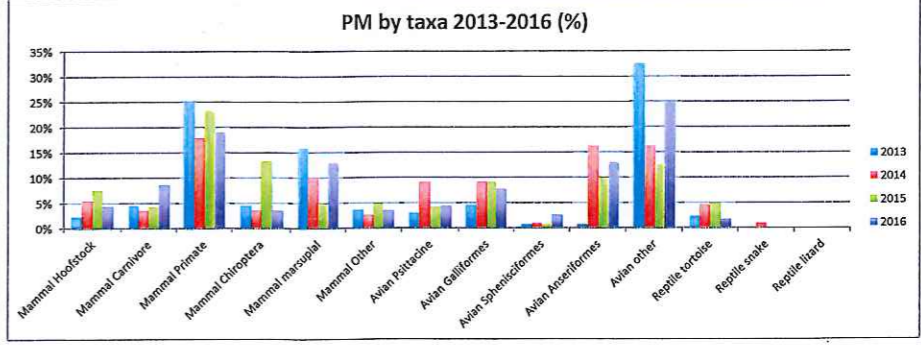
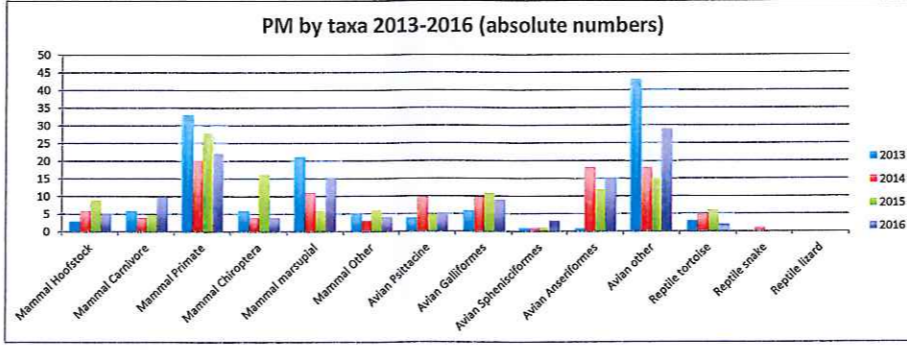


Note: 2016 current to 21st Sept

|                               | 2013 | 2014 | 2015 | 2016 |
|-------------------------------|------|------|------|------|
| No PM report                  | 105  | 48   | 50   | 56   |
| No PM report (% total cases)  | 80%  | 43%  | 42%  | 46%  |
| No PM report eaten/decomposed | 7    | 8    | 12   | 19   |
| No PM report as eaten (%)     | 5%   | 7%   | 10%  | 15%  |

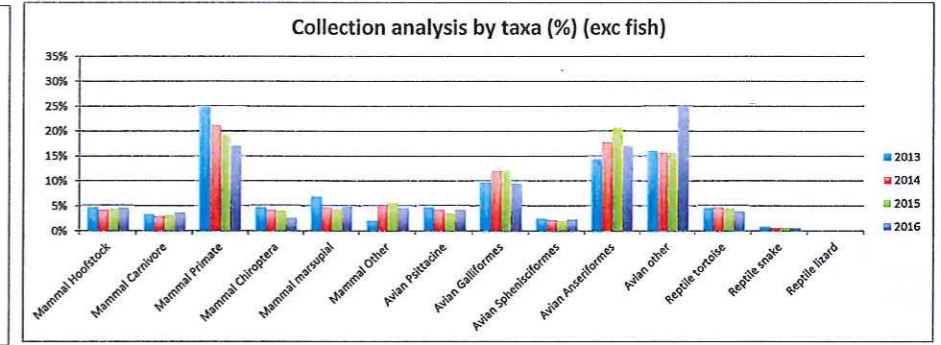
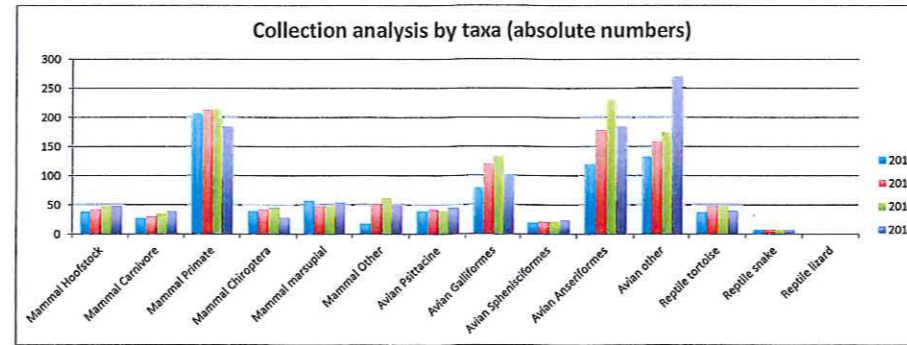
| Primary pathologist     | 2013       | 2014       | 2015       | 2016       |
|-------------------------|------------|------------|------------|------------|
| FRS                     | 0          | 55         | 53         | 51         |
| RB                      | 9          | 11         | 13         | 38         |
| RS                      | 17         | 0          | 0          | 0          |
| No vet                  | 102        | 40         | 38         | 1          |
| IZVG / external / other | 4          | 5          | 16         | 33         |
| <b>Total</b>            | <b>132</b> | <b>111</b> | <b>120</b> | <b>123</b> |

| Taxonomic groups POST MORTEM | 2013       | % total     | 2014       | % total     | 2015       | % total     | 2016       | % total     |
|------------------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| Mammal Hoofstock             | 3          | 2%          | 6          | 5%          | 9          | 8%          | 5          | 4%          |
| Mammal Carnivore             | 6          | 5%          | 4          | 4%          | 5          | 4%          | 10         | 9%          |
| Mammal Primate               | 33         | 25%         | 20         | 18%         | 28         | 23%         | 22         | 19%         |
| Mammal Chiroptera            | 6          | 5%          | 4          | 4%          | 16         | 13%         | 4          | 3%          |
| Mammal marsupial             | 21         | 16%         | 11         | 10%         | 6          | 5%          | 15         | 13%         |
| Mammal Other                 | 5          | 4%          | 3          | 3%          | 6          | 5%          | 4          | 3%          |
| Avian Psittacine             | 4          | 3%          | 10         | 9%          | 5          | 4%          | 5          | 4%          |
| Avian Galliformes            | 6          | 5%          | 10         | 9%          | 11         | 9%          | 9          | 8%          |
| Avian Sphenisciformes        | 1          | 1%          | 1          | 1%          | 1          | 1%          | 3          | 3%          |
| Avian Anseriformes           | 1          | 1%          | 18         | 16%         | 12         | 10%         | 15         | 13%         |
| Avian other                  | 43         | 33%         | 18         | 16%         | 15         | 13%         | 29         | 25%         |
| Reptile tortoise             | 3          | 2%          | 5          | 5%          | 6          | 5%          | 2          | 2%          |
| Reptile snake                | 0          | 0%          | 1          | 1%          | 0          | 0%          | 0          | 0%          |
| Reptile lizard               | 0          | 0%          | 0          | 0%          | 0          | 0%          | 0          | 0%          |
| <b>Total</b>                 | <b>132</b> | <b>100%</b> | <b>111</b> | <b>100%</b> | <b>120</b> | <b>100%</b> | <b>123</b> | <b>100%</b> |



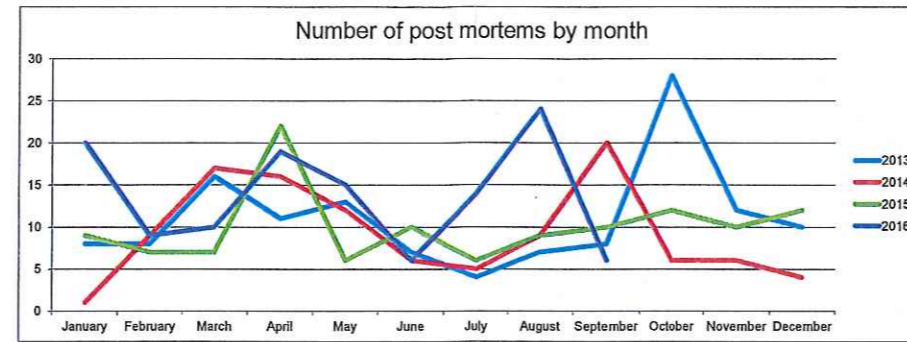
Taxonomic groups (start of year living collection)

|                       | 2013 | % total | 2014 | % total | 2015 | % total | 2016 | % total |
|-----------------------|------|---------|------|---------|------|---------|------|---------|
|                       | 829  |         | 1007 |         | 1112 |         | 1082 |         |
| Total (minus fish)    | 829  |         | 1007 |         | 1112 |         | 1082 |         |
| Mammal Hoofstock      | 39   | 5%      | 43   | 4%      | 48   | 4%      | 49   | 5%      |
| Mammal Carnivore      | 28   | 3%      | 30   | 3%      | 35   | 3%      | 40   | 4%      |
| Mammal Primate        | 207  | 25%     | 213  | 21%     | 215  | 19%     | 184  | 17%     |
| Mammal Chiroptera     | 40   | 5%      | 42   | 4%      | 46   | 4%      | 29   | 3%      |
| Mammal marsupial      | 57   | 7%      | 48   | 5%      | 48   | 4%      | 54   | 5%      |
| Mammal Other          | 18   | 2%      | 53   | 5%      | 62   | 6%      | 50   | 5%      |
| Avian Psittacine      | 40   | 5%      | 42   | 4%      | 40   | 4%      | 46   | 4%      |
| Avian Galliformes     | 80   | 10%     | 120  | 12%     | 134  | 12%     | 103  | 10%     |
| Avian Sphenisciformes | 20   | 2%      | 22   | 2%      | 22   | 2%      | 24   | 2%      |
| Avian Anseriformes    | 120  | 14%     | 179  | 18%     | 231  | 21%     | 184  | 17%     |
| Avian other           | 134  | 16%     | 159  | 16%     | 175  | 16%     | 270  | 25%     |
| Reptile tortoise      | 38   | 5%      | 48   | 5%      | 48   | 4%      | 41   | 4%      |
| Reptile snake         | 8    | 1%      | 8    | 1%      | 8    | 1%      | 8    | 1%      |
| Reptile lizard        | 0    | 0%      | 0    | 0%      | 0    | 0%      | 0    | 0%      |
|                       | 829  | 100%    | 1007 | 100%    | 1112 | 100%    | 1082 | 100%    |



NUMBER OF POSTMORTEMS BY MONTH

|           | 2013 | 2014 | 2015 | 2016 |
|-----------|------|------|------|------|
| January   | 8    | 1    | 9    | 20   |
| February  | 8    | 9    | 7    | 9    |
| March     | 16   | 17   | 7    | 10   |
| April     | 11   | 16   | 22   | 19   |
| May       | 13   | 12   | 6    | 15   |
| June      | 7    | 6    | 10   | 6    |
| July      | 4    | 5    | 6    | 14   |
| August    | 7    | 9    | 9    | 24   |
| September | 8    | 20   | 10   | 6    |
| October   | 28   | 6    | 12   |      |
| November  | 12   | 6    | 10   |      |
| December  | 10   | 4    | 12   |      |
| Total     | 132  | 111  | 120  | 123  |



| No. | Date of death | Date of PM | Taxa              | Species                  | Species                         | ID     | Sex | Age     | Weight (kg) | Microchip                           | Location       | Hx  | Gross findings   | Diagnosis   | Category           | Histology   | Microbiology  | Author   |
|-----|---------------|------------|-------------------|--------------------------|---------------------------------|--------|-----|---------|-------------|-------------------------------------|----------------|---|--|---|--------------------|---|---|----------|
| 1   | 01/01/2016    | 01/01/2016 | Avian other       | Stork                    |                                 | CCC021 | NR  | 5y8m    | 4.2         | 95600001227385                      | Ilescas Aviary | Free flying bird, found in the front field with several injuries on wings, especially left wing. Kept in vet room and tube fed for two days. Died 2 days later.   | Animal very thin, severe lacerations under the wings, lost a lot of blood and possible wing fracture. Haematomas in pectoral muscle, wings and legs. GIT empty, critical care found in the ventriculus.  | Inanition and not feeding properly due to severe injuries and loss of blood.  | RTA / Trauma       | NA  | NA  | FRS      |
| 2   | 01/01/2016    | 03/01/2016 | Mammal Carnivore  | Raccoon                  | <i>Procyon lotor</i>            | PL0050 | M   | est 16y | 5.75        | NR                                  | NR             | Lethargic reduced Appetite in bed sleeping a lot, seen by vets AG RB, loss of condition, symptoms returned a few days after death.  | Animal very thin, no muscle or SC fat, all internal organs seem in normal condition, no major findings at PME.   | Not eating properly very old animal, loss of condition in last year   | Open               | NA  | NA  | FRS      |
| 3   | 06/01/2016    | 08/01/2016 | Avian other       | Inca tern                | <i>Larosterna inca</i>          | LT1022 | M   | Adult   | NR          | NR                                  | Ilescas Aviary | Let out to aviary for the first time, adverse climate conditions. One of five birds found dead overnight. Unable to perform PME as eaten by the vultures.   | NA   | Exposure  | Husbandry          | NA  | NA  | FRS      |
| 4   | 06/01/2016    | 06/01/2016 | Avian other       | Inca tern                | <i>Larosterna inca</i>          | LT1020 | M   | Adult   | NR          | NR                                  | Ilescas Aviary | Let out to aviary for the first time, adverse climate conditions. One of five birds found dead overnight. Unable to perform PME as eaten by the vultures.   | NA   | Exposure  | Husbandry          | NA  | NA  | FRS      |
| 5   | 06/01/2016    | 06/01/2016 | Avian other       | Inca tern                | <i>Larosterna inca</i>          | LT1015 | F   | Adult   | NR          | NR                                  | Ilescas Aviary | Let out to aviary for the first time, adverse climate conditions. One of five birds found dead overnight. Unable to perform PME as eaten by the vultures.   | NA   | Exposure  | Husbandry          | NA  | NA  | FRS      |
| 6   | 06/01/2016    | 06/01/2016 | Avian other       | Inca tern                | <i>Larosterna inca</i>          | LT1009 | F   | Adult   | NR          | NR                                  | Ilescas Aviary | Let out to aviary for the first time, adverse climate conditions. One of five birds found dead overnight. Unable to perform PME as eaten by the vultures.   | NA   | Exposure  | Husbandry          | NA  | NA  | FRS      |
| 7   | 06/01/2016    | 06/01/2016 | Avian other       | Inca tern                | <i>Larosterna inca</i>          | LT1031 | F   | Adult   | NR          | NR                                  | Ilescas Aviary | Let out to aviary for the first time, adverse climate conditions. One of five birds found dead overnight. Unable to perform PME as eaten by the vultures.   | NA   | Exposure  | Husbandry          | NA  | NA  | FRS      |
| 8   | 08/01/2016    | 08/01/2016 | Mammal Hoofstock  | Muntjac deer             | <i>Muntiacus reevesi</i>        | MRR015 | F   | 6y6m    | NR          | NR                                  | NR             | Acute diarrhoea caused by anaerobes   | In good body condition with no external signs of injury, runny faeces observed around anus and hind legs, small amount of free fluid in abdomen, liver, heart, lungs NAD. Green paste in stomach, no signs of fibre or hay ingesta. Liquid greenish content in small and large intestines which showed acute enteritis and diarrhoea, small intestines inflamed and pink.  | Acute enteritis and dehydration   | Infectious         | NA  | Swab: profuse growth of mixed anaerobes.  | FRS      |
| 9   | 15/01/2016    | 15/01/2016 | Avian other       | Night heron              |                                 |        | NR  | NR      | 0.841       | NNX011                              | NR             |   | Externally no signs of injury or wounds, some blood was observed coming from the beak and nostrils. Internally bleeding around GIT - kidneys and liver blood clots observed inside the cavity, some fish content in the gizzard. Cause of death - due to signs of internal bleeding, rat poison or eating a mouse with rat bait contents.  | Rodenticide poisoning - note ddx trauma   | Husbandry          | NA  | NA  | FRS      |
| 10  | 16/01/2016    | 16/01/2016 | Avian other       | Little egret             |                                 | EG040  | NR  |         | 0.4         | Green AD                            | NR             |   | Externally no signs of wounds or injuries, body condition thin. No food content observed in GIT. Last section of SI was necrotic and hyperaemic.   | Possible torsion of small intestines or blockage, although nothing was found inside the tract, causing necrosis in the last portion of the small intestines - note ddx infectious enteritis | Infectious         | NA  | Swab: NAD   | FRS      |
| 11  | 20/01/2016    | 23/01/2016 | Mammal Other      | Red squirrel             | <i>Sciurus vulgaris</i>         | SV007  | F   |         | 0.246       |                                     | NR             |   | No external signs of trauma, total lack of gross PM pathology, all organs looked normal, no food in the GIT and no faeces.   | Emaciated, inanition.   | Husbandry          | NA  | NA  | NR       |
| 12  | 20/01/2016    | 20/01/2016 | Mammal Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodricensis</i>     | PR021  | M   | 2 years | 0.214       | NR                                  | NR             | Found on floor, cold, no grip.  | BCS good, moderate SC and intrabdominal fat. GIT unremarkable, respiratory system small blood clots between left and right lung, heart NAD, renal NAD  | 1. Focally extensive moderate acute SC and IM haemorrhage skull; 2. Presumed marginal moderate acute haemorrhage, lung; 3. Mild haemorrhax. Comment: Suggestive of acute trauma.            | RTA / Trauma       | NA  | NA  | IZVG     |
| 13  | 21/01/2016    | 21/01/2016 | Avian other       | Southern ground hornbill | <i>Bucorvus leadbeateri</i>     | BLB003 | F   | est 7y  | 3.3         | 528210004000864                     | NR             | Found in house dead. One eye missing, blood on beak and back of neck.   | Bird in good body condition, it was visibly pecked on the back of the head and face. This likely occurred as the bird was recumbent and dying. There was dramatic pathology visibly immediately upon skinning to the bird, there was massive areas of haemorrhage in the groin and inner thighs on both legs. There was more haemorrhage in the abdomen, both lungs were full of haemorrhage. There was free blood in the trachea. There was partly digested chick in the ventriculus. | Likely cause of death is ingestion of anticoagulant rodent poisoning - ddx trauma   | Husbandry          | NA  | NA  | RB       |
| 14  |               | 23/01/2016 | Avian anatidae    | Fulvous whistling duck   |                                 | DB0005 |     |         |             |                                     | NR             | Found dead in aviary, partly eaten  | Unable to PM - body eaten  | Open - scavenged/predation  | Open               | NA  | NA  | NR       |
| 15  | 23/01/2016    | 23/01/2016 | Mammal Carnivore  | Tayra                    | <i>Eira barbara</i>             |        | M   | 10y     | 3.8         | Tupac                               | NR             | Prolapse seemed to be coming out of his rear, very skinny   | Emaciated, incisors and canines frequently broken off or shortened, mild tartar. GIT NAD but scanty contents, shrunken liver, dilated gall bladder, lungs NAD (anthyraeositis), heart NAD, kidneys slightly rubbery.   | 1. Emaciation with serous fat atrophy, diffuse muscle wasting and hepatic atrophy; 2. Presumed mild interstitial fibrosis, kidneys.   | Anatomical         | Anthraxillosis, haemosiderosis liver and lung, no evidence of renal pathology. Open | Parasitology - unremarkable; Microbiology - unremarkable                                      | IZVG     |
| 16  | 23/01/2016    | 23/01/2016 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>     | MF0129 | F   | 3y      | 23.05       | MC000008247873                      | NR             | Disorientated, looked OK at AM checks and seen eating, then ill in afternoon and dead 2 hours later   | Good BCS, live hairless Joey 15cm in pouch, no external signs of injury. Upon opening the abdomen the cause of death was obvious: severely congested purple coloured small intestine approx 30cm in length. No visible torsion of the mesentery to explain this, abdomen contained approx 100ml of pink/purple fluid. Mesentery appeared septicaemic/toxic.  | Red gut - clostridial disease, maybe due to fermentation of cereal pellets creating the correct conditions for release of enterotoxins. Note - no evidence of clostridial disease.          | Infectious         | NA  | Bacteriology: 15cm section of affected gut - negative for bacteriology and clostridial toxins | RB       |
| 17  | 25/01/2016    | 25/01/2016 | Mammal Primate    | Common squirrel monkey   | <i>Saimiri sciureus</i>         | SS0032 | M   | 4y      | 0.752       | 956000008250944                     | NR             | Fighting amongst the group, several injuries obtained. Animal was attacked by other males, causing him serious injuries and wounds in chest, legs and abdomen. Was very weak, thin and exhausted. Kept in vet room and given meloxicam. Died overnight. | Conspecific trauma   | Conspecific injury  | NA                 | NA  | FRS   |          |
| 18  | 25/01/2016    | 25/01/2016 | Mammal Hoofstock  | Alpaca                   | <i>Vicugna pacos</i>            | LP0003 | F   | 6y9m    |             | Sunni                               | NR             | This alpaca was outside with the group in wet, cold weather. Was losing weight and not feeding enough, noted keepers unable to notice due to the wool.  | Externally animal was in very poor BCS, no muscle or body fat, no signs of wounds or injuries. Coat was totally wet and cold, water had gone through wool. There was a total lack of gross PME pathology, all organs appeared normal. No food content in GIT. Parasite positive for <i>Trichostrongylus</i> spp. No diagnosis could be reached on the evidence of this PM.   | Cause of death due to hypothermia due to exposure to extreme weather conditions, emaciation, trichostrongylus infection. Exposure   | Husbandry          | NA  | NA  | FRS      |
| 19  | 28/01/2016    | 22/02/2016 | Avian Galliformes | Common peafowl           | <i>Pavo cristatus</i>           | PC0001 | M   | Adult   | 4.1         |                                     | NR             | This bird had been found dead under some timber planks, there had been a suspicion one of these may have fallen and injured the bird.   | No external indication of injury on the body, total lack of gross PME pathology. All organs appeared normal and there was food in the ventriculus and normal faeces in the lower GIT.  | Open  | Open               | NA  | NA  | RB       |
| 20  | 31/01/2016    | 31/01/2016 | Avian Galliformes | Lady Amherst's pheasant  | <i>Chrysolophus amherstiae</i>  | CAM011 | M   | 3y      | NR          | Blue CH                             | NR             | Unable to perform PM - body eaten   | Open - scavenged/predation   | Open  | NA                 | NA  | RB / FRS  |          |
| 21  | 01/02/2016    | 01/02/2016 | Avian other       | Eurasian spoonbill       | <i>Plectropterus leucorodia</i> | PL0053 | UNK | 19y     | 2.25        | Blue WA                             | NR             | Found in pond in aviary   | No PM performed.   | Very old bird - couldn't cope with the extreme weather conditions and storm, no PM performed.   | Husbandry          | NA  | NA  | NR       |
| 22  | 01/02/2016    | 01/02/2016 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>     | MF0061 | M   | 8m      | 5.25        | No chip found but ZIMS 956000477766 | NR             | Disorientation, small amounts of blood around back end. Treated 24 hours prior to death for acute haemorrhagic diarrhoea  | Good BCS, significant volume of free fluid in abdomen (40ml), pink in colour. 15ml free fluid in thorax. Heart had lungs NAD. Abdominal viscera NAD. No food in stomach. SI enteritis, pink / purple colour and red smealy faeces.   | Acute haemorrhagic enteritis  | Infectious         | NA  | Microbiology: GIT contents mixed flora and heavy growth of non-haemolytic E.coli              | RB       |
| 23  | 05/02/2016    | 06/02/2016 | Avian other       | Sacred ibis              | <i>Threskiornis aethiopicus</i> | TA0027 | UNK | UNK     | 1.275       | Red SO                              | NR             | Limp, difficulty walking. Euthanased  | No PM report   | No PM report  | Open               | NA  | NA  | RB       |
| 24  | 09/02/2016    | 09/02/2016 | Avian anatidae    | Cape teal                | <i>Anas capensis</i>            | ACP008 | F   | NR      | 0.254       | Green FV left                       | NR             | Found dead on path  | No PM performed decomposed   | Decomposed  | Open               | NA  | NA  | FRS      |
| 25  | 17/02/2016    | 17/02/2016 | Avian other       | Rosette spoonbill        |                                 | NA     | UNK | Chick   | 0.4         | NA                                  | NR             | Fell from nest  | No PM report   | Fell from nest  | RTA / Trauma       | NA  | NA  | FRS      |
| 26  | 21/02/2016    | 21/02/2016 | Avian anatidae    | North American wood duck | <i>Aix sponsa</i>               | AS0041 | F   | NR      | 0.25        | Green BB                            | NR             |   | No external injury on the body, lack of gross PM pathology, all organs normal. No food in the GIT, no faeces. No diagnosis could be reached on the evidence of this PME  | Open  | Open               | NA  | NA  | FRS      |
| 27  | 24/02/2016    | 24/02/2016 | Mammal Primate    | Common squirrel monkey   | <i>Saimiri sciureus</i>         | SS0037 | M   | 4y      | 0.95        | 956000008251722                     | NR             | Aggression within the group, multiple injuries occurred.  | Multiple fatal wounds - no PM performed.   | Conspecific trauma  | Conspecific injury | NA  | NA  | RB       |
| 28  | 25/02/2016    | 04/03/2016 | Mammal Primate    | Ring tailed lemur        | <i>Lemur catta</i>              | LC0049 | F   | 10y     | 2           | MC00066439A6                        | NR             | Prolapsed vagina for months, pen strep - dexafort, sutured vagina. Euthanased.  | Euthanased - prolapsed vagina  | Anatomical  | NA                 | NA  | RB  |          |
| 29  | 29/02/2016    |            | Avian Galliformes | Swinhoe's pheasant       | <i>Lophura swinhoii</i>         | LS0003 | M   | 3y      | 1.45        | Blue HZ                             | NR             | Attacked by white eared pheasant, with visible injuries on head, neck and legs. Not clear if killed or died in aftercare.   | Good BCS, normal body muscle, injuries and wounds on head, neck and legs. Big puncture wound on neck with visible internal haematomas. Signs of internal focal bleeding caused by fighting with other bird.  | Cause of death due to severe injuries caused by fighting with white eared pheasant. No need for further investigation   | Conspecific injury | NA  | NA  | FRS      |
| 30  | 14/03/2016    | 14/03/2016 | Avian other       | Chilean flamingo         | <i>Phoenicopterus chilensis</i> | PCC019 | M   |         | 1.8         | Blue AXT                            | NR             | Broken wing, looked like old injury, exposed bones. Sudden death with no previous signs of illness or injury.   | Bird looked thin, with little body muscle. Obvious open fracture of the right radius bone, fracture looked at least a week old, the wing was swollen in the area and had formed a scab around the wound. The area around the open fracture was infected. The bird did not show any signs of pain and was together with the group until found dead in the morning. No need for further investigation - note image on file of fracture - appears close to the carpus.                    | Old, open fracture of the right radial aspect of the carpus, cause of death not reported but assumed related.   | RTA / Trauma       | NA  | NA  | RB / FRS |

| No. | Date of death | Date of PM | Taxa                  | Species                    | Species                            | ID     | Sex | Age     | Weight (kg) | Microchip          | Location           | Hx   | Gross findings   | Diagnosis   | Category           | Histology   | Microbiology  | Author    |
|-----|---------------|------------|-----------------------|----------------------------|------------------------------------|--------|-----|---------|-------------|--------------------|--------------------|--|--|---|--------------------|---|---|-----------|
| 31  | 17/03/2016    | 17/03/2016 | Mammal marsupial      | Parma wallaby              | <i>Macropus parma</i>              | MP0140 | F   | 8 weeks | 0.542       | 956000004717776    | NR                 | Found dead in the parma hut. The animal had his 2nd dose of heptavac 8 days prior to death   | Good BCS, no external signs of injury, runny faeces observed around anus, tail and legs. Small amount of free fluid in abdominal cavity. Heart had lungs NAD, liver NAD. Stomach contained a green paste but no signs of fibre or hay ingesta, gross pathology performed on the intestines, liquid greenish content in small and large intestines - acute enteritis and diarrhoea. Small intestines pink and inflamed. | Acute enteritis and dehydration                     | Infectious         | NA  | NA  | FRS       |
| 32  | 18/03/2016    | 18/03/2016 | Avian other           | Turkey vulture             | <i>Cathartes aura</i>              | CAU011 | UNK | NR      | 1.25        | Red VR             | NR                 | Packed by black vultures, enrofloxacin and meloxicam, severe injuries caused by the black vultures. Multiple similar incidents with this bird but most recent just prior to death damaged legs and parts of the body. Not able to stand up nor use the right leg. Died. Injuries were serious and deep, bird will not take any food and became very weak. No need for further investigation. | Conspecific injury (black vultures)  | Conspecific injury                                  | NA                 | NA  | RB/FRS  |           |
| 33  | 19/03/2016    | 20/03/2016 | Mammal marsupial      | Parma wallaby              | <i>Macropus parma</i>              | MP0125 | F   | 3y      | 3.15        | 956000001226339    | NR                 | Tail abscess, on alamyacin LA, kept in vet room for treatment. Stress and shock for being locked in for treatment combined with septicemia and tail infection thought to have led to death.  | Tail abscess, septicaemia, stress of isolation   | Infectious  | NA                 | NA  | RB  |           |
| 34  | 22/03/2016    | 22/03/2016 | Mammal Carnivore      | Sumatran tiger             | <i>Panthera tigris sumatrae</i>    |        | M   | 14y     | NR          | Padang             | NR                 | Euthanased at request of DG, no notes as to reason. AG euthanased.   | No report  | Cuffed  | Management         | NA  | NA  | NR        |
| 35  | 24/03/2016    | 24/03/2016 | Avian anatidae        | Ruddy shelduck             | <i>Tadorna ferruginea</i>          | TF0002 | UNK | 2y8m    | NR          | Green CN           | NR                 | Found with head caught under bench overnight   | No PME carried out   | Run over by train                                   | Husbandry          | NA  | NA  | FRS       |
| 36  | 26/03/2016    | 27/03/2016 | Avian anatidae        | North American wood duck   | <i>Aix sponsa</i>                  | AS0033 | M   | NR      | 0.533       | Unbanded           | NR                 | Run over by road train   | No PME carried out   | Run over by train                                   | RTA / Trauma       | NA  | NA  | RB        |
| 37  | 26/03/2016    | 27/03/2016 | Mammal Chiroptera     | Rodriguez fruit bat        | <i>Pteropus rodricensis</i>        | PR0073 | F   | 10y     | 0.313       |                    | NR                 | Caught both wings inbetween mesh, both wings with opened fractures. Bone exposed. Died a few minutes later due to shock.   | No PM report except images of the fractures of the wing (appears to be the right wing).  | Open, fractured wings                               | RTA / Trauma       | NA  | NA  | FRS       |
| 38  | 28/03/2016    | 28/03/2016 | Reptile tortoise      | Spur thighed tortoise      | <i>Testudo graeca</i>              | TM0006 | UNK | UNK     | 0.575       | 956000001542831    | Anteater enclosure | Missing for weeks, found dead in anteater enclosure, body decomposed, unable to perform PME.   | No PM decomposed   | Decomposed  | Open               | NA  | NA  | FRS       |
| 39  | 29/03/2016    | 29/03/2016 | Mammal marsupial      | Parma wallaby              | <i>Macropus parma</i>              | MP0133 | F   | 1y6m    | 2.85        | 956000003198415    | NR                 | "Bracken", no history  | Acute peritonitis, from ruptured stomach wall. Ulcerated at abscess site adjacent to liver, large distended mesenteric LN, over 100mls of red/brown pus in abdomen. Yellow fibrin strands over the liver and spleen surfaces.  | Acute peritonitis                                   | Infectious         | NA  | NA  | RB        |
| 40  | 02/04/2016    | 05/04/2016 | Avian Galliformes     | Chicken                    | <i>Gallus gallus domesticus</i>    | NR     | M   | NR      | NR          | NR                 | NR                 | No history   | No gross pathology to indicate cause of death, grain in crop, normal faeces, thin BCS, no signs of injury nor trauma   | Open  | Open               | NA  | NA  | RB        |
| 41  | 03/04/2016    | 05/04/2016 | Avian other           | Little egret               | <i>Egretta garzetta</i>            | EG0020 | F   | NR      | 0.48        | Red AF             | Aviary             | Found dead in aviary on arrival in morning.  | No gross pathology to indicate cause of death. No food in gizzard, normal faeces, good body condition, no signs of injury nor trauma   | Open  | Open               | NA  | NA  | RB        |
| 42  | 02/04/2016    | 05/04/2016 | Mammal marsupial      | Parma wallaby              | <i>Macropus parma</i>              | MP0118 | F   | 4y10m   | 3.15        | 956000001228673    | NR                 | "Brindy" was found dead in enclosure, no prior symptoms of illness had been noted.   | Good BCS, no signs of trauma to the body, gross pathology was obvious in the abdominal cavity, there was approximately 50ml of red stained free fluid. There was a 1.5cm abscess in the bowel wall at the ileocaecal junction. This area was inflamed and purple in colour, all other abdominal organs were grossly normal. The chest cavity was normal.   | Acute peritonitis from intestinal wall abscess      | Infectious         | NA  | NA  | RB        |
| 43  | 08/04/2016    | 09/04/2016 | Mammal Chiroptera     | Rodriguez fruit bat        | <i>Pteropus rodricensis</i>        | PR0209 | NR  | NR      | 0.198       | 956000002849919    | Tropical house     | Broken leg, euthanased by RB   | Broken leg   | RTA / Trauma  | NA                 | NA  | RB  |           |
| 44  | 08/04/2016    | 08/04/2016 | Avian anatidae        | North American wood duck   | <i>Aix sponsa</i>                  | AS0026 | M   | NR      | 0.834       | 250228500005660    | Birds              | Run over by road train, no PME performed   | No PM report   | Run over  | RTA / Trauma       | NA  | NA  | RB        |
| 45  | 10/04/2016    | 10/04/2016 | Avian Galliformes     | Lady Amherst's pheasant    | <i>Chrysolophus amherstiae</i>     | CAM009 | M   | NR      | 0.699       | 227 AP 13 12       | Birds              | Run over by ranger, no PME performed   | No PM report   | Run over  | RTA / Trauma       | NA  | NA  | RB        |
| 46  | 14/04/2016    | 14/04/2016 | Avian other           | Western cattle egret       | <i>Butoribulcus ibis ibis</i>      | BI0027 | UNK | NR      | NR          | Blue CH            | NR                 | The bird was found dead below the nests in the enclosure, no prior symptoms of disease had been noted.   | It was in good BCS, there was no external or internal signs of traumatic injury, all organs were grossly normal. There were no indicators of infection or septicemia, there was food in the upper GIT, there was some dark brown / green loose faeces in the lower section of the bowel. No cause of death identified.   | Open  | Open               | NA  | Microbiology and parasitology faeces, NAD   | RB        |
| 47  | 14/04/2016    | 14/04/2016 | Avian Galliformes     | Golden pheasant            | <i>Chrysolophus pictus</i>         | CPC011 | F   | NR      | NR          | Red CN             | NR                 | The bird was found comatose this afternoon and died soon after.  | It was very emaciated with a distended abdominal cavity, there was severe peritonitis with fibrinous pus overlying the intestines. The liver was grossly swollen and full of yellow green abscesses. This was obviously a chronic condition which had been progressing for quite a long time. Sections of liver have been submitted for lab investigation.   | Necrogranulomatous hepatitis (avian TB)             | Infectious         | Marked multifocal to confluent necrogranulomatous hepatitis with giant cell formation and mild hepatic amyloidosis, liver. ZN positive - assumed mycobacterium avium. | NA  | RB / IZVG |
| 48  | 16/04/2016    | 16/04/2016 | Mammal Chiroptera     | Rodriguez fruit bat        | <i>Pteropus rodricensis</i>        | PR0203 | F   | NR      | 0.252       | 956000008228079    | NR                 | PM not performed - stayed in Andrew's car for days   | No PM report   | Open  | Open               | NA  | NA  | 7AG / FRS |
| 49  | 18/04/2016    | 18/04/2016 | Mammal marsupial      | Western grey kangaroo      | <i>Macropus fuliginosus</i>        | NA     | UNK | Joey    | NR          | Dam MF0142         | World Safari area  | Joey found dead lying on floor in world safari area  | Early stage, no fur grown yet, dropped from pouch, no need for further investigation   | Open  | Open               | NA  | NA  | FRS       |
| 50  | 18/04/2016    | 18/04/2016 | Avian Galliformes     | Chicken                    | <i>Gallus gallus domesticus</i>    | GD001  | M   | NR      | NR          | NR                 | NR                 | Body covered in lice   | No PM report   | Open  | Open               | NA  | NA  | RB        |
| 51  | 21/04/2016    | 21/04/2016 | Mammal marsupial      | Parma wallaby              | <i>Macropus parma</i>              | MP0122 | F   | 5y      | 2.8         | NR                 | NR                 | "Ceres", symptoms encephalitis, treated with enyemycin, extravite and dexamethasone, kept in vet room. AG submission notes: seizures, unstable, falling to left side, possible stroke or encephalitis. Problem started 14/04/16  | Very thin, teeth OK, watery green GIT contents, brain congested vessels, emaciated otherwise unremarkable.   | Open  | Open               | NA  | Extensive - no evidence of cause of clinical signs, no evidence of toxoplasmosis nor encephalitis, nor stroke | IZVG      |
| 52  | 23/04/2016    | 23/04/2016 | Reptile tortoise      | African spurred tortoise   | <i>Centrochelys sulcata</i>        | GS0001 | M   | 16y     | 27          | 956000008251979    | NR                 | "Sasha", lethargic, not eating, eyes shut, getting worse last three months. Treated with enrofloxacin, flaxadrenon, amoxicillin, extravite   | No PME performed   | Open  | Open               | NA  | NA  | RB / FRS  |
| 53  | 23/04/2016    | 24/04/2016 | Mammal Primate        | White-bellied ruffed lemur | <i>Varecia variegata subcineta</i> | VVS017 | F   | 1y21d   | 3           | 956000001521212    | NR                 | "Karaina", drowned in pond - fighting with other lemurs the night prior to death. Was found dead in the pond next day.   | Body completely soaking wet, fine white froth at the mouth and nose. No signs of injuries or wounds, bloody watery fluid in sinuses. Thoracic cavity voluminous water logged lungs, pleural fluid accumulation, sub pleural haemorrhage. Water in stomach and intestines.  | Drowned   | Conspecific injury | NA  | NA  | FRS       |
| 54  | 26/04/2016    | 26/04/2016 | Avian other           | Black crowned night heron  | <i>Nycticorax nycticorax</i>       | NNX005 | UNK | 4y      | 0.52        | NR                 | NR                 | Amputated maxilla just rostral to the eye, euthanased by RB  | Amputated top half of beak, either caught or done by a macaw.  | Euthanased - loss of maxilla                        | Conspecific injury | NA  | NA  | RB / FRS  |
| 55  | 26/04/2016    | 26/04/2016 | Avian Sphenisciformes | Humboldt penguin           | <i>Spheniscus humboldti</i>        | NR     | UNK | 1 week  | 0.19        | NR                 | NR                 | Parental neglect, undeveloped, thin and smaller than others in the nest.   | Bird very thin, no presence of food in GIT. Parental neglect and undeveloped in comparison to other chicks. No need for further investigation.   | Open  | Husbandry          | NA  | NA  | FRS       |
| 56  | 26/04/2016    | 26/04/2016 | Avian anatidae        | Magellanic steamer duck    | <i>Tachyeres pleneres</i>          | TPT001 | F   | NR      | 2.1         | Red VA             | NR                 | Stopped eating fish a few weeks ago, no signs of other illness. Was eating duck mix OK.  | IZVG PME: penetrating wire FB and non-penetrating FB with concurrent chronic-active coelomitis, air sacculitis and ventriculitis, granulomatous air sacculitis consistent with aspergillosis, emaciated  | GIT FB penetration and coelomitis and aspergillosis | Husbandry          | NA  | Aspergillosis fuligatus   | IZVG      |
| 57  | 20/04/2016    | ?          | Mammal Primate        | Ring tailed lemur          | <i>Lemur catta</i>                 | NA     | UNK | 2wks    | 0.18        | Dam LC0111 Marlene | NR                 | One of two twins, both excessive overgrooming from dam, eye infection, cranial wound. Died of excessive carrying and dragging from the mother, baby was wounded and scratched in several places.   | No PM report   | Mismothering  | Husbandry          | NA  | NA  | FRS       |
| 58  | 29/04/2016    | ?          | Mammal Primate        | Ring tailed lemur          | <i>Lemur catta</i>                 | NA     | UNK | 3wks    | 0.192       | Dam LC0111 Marlene | NR                 | Two of two twins, both excessive overgrooming from dam, eye infection, cranial wound. Died a few days after with a wound on the skull with bone exposure, due to voer grooming which would grow bigger every day.  | No PM report - images taken of head  | Mismothering  | Husbandry          | NA  | NA  | FRS       |
| 59  | 02/05/2016    | 02/05/2006 | Avian other           | Little egret               | <i>Egretta garzetta</i>            | EG0042 | UNK | 11m     | 0.42        | Green J7           | NR                 | Right hind caught in mesh, femur broken, bone exposed (JC note images shows tibiotarsal fracture), lost blood, hypovolaemic shock.   | Shock due to broken femur with open fracture, femur broken in two, exposed bone and tissue damage. JC note - image shows tibiotarsus fracture  | Fractured tibiotarsus                               | RTA / Trauma       | NA  | NA  | FRS       |
| 60  | 04/05/2016    | 04/05/2016 | Mammal Primate        | Brown spider monkey        | <i>Ateles hybridus</i>             | AH0001 | M   | NR      | 4.6         | NR                 | NR                 | "Pablo" euthanased due to gangrenous infection and loss of circulation in arm following severe bite wounds, treated week previously. Severe wounds to right arm and face - had surgery - stitches to face, arm and head. Had to reconstruct nose. After 4 days he had chewed on his arms, ripping the stitches and was unable to use arm. Euth. Meloxicam and alamyacin LA.                  | No PM report - images  | Conspecific injuries - euthanased                   | Conspecific injury | NA  | NA  | RB / FRS  |
| 61  | 05/05/2016    | 05/05/2016 | Avian Psittacine      | Orange winged amazon       | <i>Amazona amazonica</i>           | AA0066 | M   | 16y     | NR          | NR                 | NR                 | Unable to perform PM - body eaten  | No PM report   | Body eaten (JC - rodents?)                          | Open               | NA  | NA  | RB        |
| 62  | 11/05/2016    | 11/05/2016 | Avian other           | EA Grey crowned crane      | <i>Balaenica reguforum gib.</i>    | BRG003 | F   | 16y     | NR          | Blue NP            | NR                 | Left foot broken - trauma, euth. Euth by AG due to left foot fracture, will not be able to walk properly again, fracture occurred overnight reasons for trauma are undetermined.   | No PM report - images  | Euthanased - left foot fracture                     | RTA / Trauma       | NA  | NA  | AG / FRS  |

| No. | Date of death | Date of PM | Taxa                  | Species                  | Species                                | ID     | Sex | Age     | Weight (kg) | Microchip                   | Location      | Hx   | Gross findings   | Diagnosis   | Category           | Histology   | Microbiology  | Author    |
|-----|---------------|------------|-----------------------|--------------------------|--|--------|-----|---------|-------------|-----------------------------|---------------|--|--|---|--------------------|---|---|-----------|
| 63  | 19/05/2016    | 19/05/2016 | Avian Sphenisciformes | Humboldt penguin         | <i>Spheniscus humboldti</i>            | SH0030 | UNK | 1y      | 1.75        | NR                          | NR            | Loss weight, not eating, enrofloxacin and extraxile with supportive feeding. Nursed three days prior to death, spotted as lethargic and very thin. It would not eat voluntarily but would swallow fish when hand fed.  | Poor BCS, left thoracic air sac was grey/black mass of fungal plaque with infiltration into enlarged thymic tissue in front of the heart. Aspergillosis - issues to IZVG   | Aspergillosis   | Infectious         | Neurogranulomatous pneumonia and airsaccuflates, A.fumigatus.   | NA  | RB / IZVG |
| 64  | 19/05/2016    | 19/05/2016 | Avian other           | Glossy ibis              | <i>Plegadis falcinellus</i>            | PF001  | F   | 9y      | 0.418       | D367                        | Aviary        | Unable to perform PM - body eaten  | No PM report   | Open  | Open               | NA  | NA  | RB        |
| 65  | 20/05/2016    | 20/05/2016 | Mammal Other          | Capybara                 | <i>Hydrochaeris palagonum</i>          | NR     | NR  | 20 days | 2.1         | Dam HH0032                  | NR            | No toes - lost toes in front legs, euthanased, one of two  | No PM report   | Dam( or congenital) loss of toes - euthanased   | Conspecific injury | NA  | NA  | RB        |
| 66  | 20/05/2016    | 20/05/2016 | Mammal Other          | Capybara                 | <i>Hydrochaeris palagonum</i>          | NR     | NR  | 20 days | 2.1         | Dam HH0032                  | NR            | No toes - lost toes in front legs, euthanased, two of two  | No PM report   | Dam( or congenital) loss of toes - euthanased   | Conspecific injury | NA  | NA  | RB        |
| 67  | 21/05/2016    | 21/05/2016 | Avian Psittacine      | Blue and yellow macaw    | <i>Ara ararauna</i>                    | AA0051 | NR  | NR      | 0.94        | 6035001                     | Tambopatha    | "Oakley" Sudden death  | IZVG gross PM splenomegaly and hepatomegaly  | Salmonellosis?  | Infectious         | NA  | Salmonellosis spp group D isolated, res to cindamycin, multiple other sensitivities | AG / IZVG |
| 68  | 22/05/2016    | 22/05/2016 | Mammal Primate        | Common squirrel monkey   | <i>Saimiri sciureus</i>                | SS0053 | F   | 7m      | 0.21        | Parents SS0024 /005         | NR            | No signs, sudden death   | IZVG weight reported as 370g. Marked congestion of meninges and mild enteropathy.  | Pasteurella multocida meningitis  | Infectious         | NA  | Pasteurella multocida resistant neomycin, multiple sensitivities                    | AG / IZVG |
| 69  | 23/05/2016    | 23/05/2016 | Mammal Hoofstock      | Giraffe                  | <i>Giraffa camelopardalis</i>          | GC0027 | M   | 1y2m    | NR          | NR                          | NR            | NR   | APHA PME - normal gross anatomy with no morphological diagnosis (JC gross sounds like PAMS)  | None / PAMS   | Husbandry          | NA  | NA  | APHA      |
| 70  | 25/05/2016    | 25/05/2016 | Mammal marsupial      | Red kangaroo             | <i>Macropus rufus</i>                  | MR0088 | F   | >3y     | NR          | 276098104673070             | NR            | "Abby"   | Severe head trauma, fractured maxilla and brain damage   | Head trauma   | RTA / Trauma       | NA  | NA  | RB        |
| 71  | 25/05/2016    | 25/05/2016 | Mammal Hoofstock      | Babirusa                 | <i>Babirusa babyrussa</i>              | BB0001 | F   | 16y     | NR          | Kota                        | NR            | Arthritis, loss of appetite, wasting, meloxicam and prednisolone, went off her legs and died. Hx spinal arthritis  | Gross PME did not reveal any significant abnormalities in her organs   | Death due to aging and arthritis progression  | Anatomical         | NA  | NA  | RB        |
| 72  | 30/05/2016    | 30/05/2016 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                     | LC0179 | M   | 3y      | 2.9         | NR                          | NR            | Run over by road train   | No PM report   | Run over by road train  | RTA / Trauma       | NA  | NA  | RB        |
| 73  | 01/06/2016    | 01/06/2016 | Avian other           | King vulture             | <i>Sacroramphus papa</i>               | SP0006 | M   | 24y     | 3.8         | NR                          | NR            | Weak, not eating, kept inside, found dead the next day, submitted to IZVG  | IZVG PME: Chronic proliferative and ulcerative dermatitis, fungal colonisation of proventriculus   | Peracute bacterial sepsis - likely keel dermatitis  | Infectious         | Bacterial embolisation multiple tissues, fibronecrotising nephritis, myocardial fibrosis                  | NA  | IZVG      |
| 74  | 02/06/2016    | 02/06/2016 | Avian anatidae        | Ringed teal              | <i>Callonetta leucophrys</i>           | CL0012 | M   | 7y      | NR          | NR                          | NR            | Unable to perform PM - body eaten  | No PM report   | Scavenged - body eaten  | Open               | NA  | NA  | RB        |
| 75  | 07/06/2016    | 07/06/2016 | Avian anatidae        | Fulvous whistling duck   | <i>Dendrocygna bicolor</i>             | DB0006 | UNK | NR      | 0.515       | Blue SF                     | NR            | Unable to perform PM - body eaten  | No PM report   | Scavenged - body eaten  | Open               | NA  | NA  | RB        |
| 76  | 11/06/2016    | 11/06/2016 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                     | LC0217 | F   | 2m      | 0.323       | 956000004848615             | NR            | Overgrown by mother, leg injured and licked until bone exposure - parent behaviour   | No PM report - images  | Mismothering  | Husbandry          | NA  | NA  | RB / FRS  |
| 77  | 15/06/2016    | 15/06/2016 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                     | LC0220 | F   | 1m20d   | 0.415       | NR                          | NR            | Two puncture wounds on neck, found dead overnight  | No PM report   | Conspecific trauma  | Conspecific injury | NA  | NA  | RB / FRS  |
| 78  | 27/06/2016    | 27/06/2016 | Avian anatidae        | North American wood duck | <i>Aix sponsa</i>                      | AS0018 | F   | NR      | 0.8         | NR                          | NR            | Unable to perform PM - decomposed  | No PM report   | Open  | Open               | NA  | NA  | RB / FRS  |
| 79  | 03/07/2016    | 03/07/2016 | Avian anatidae        | Patagonian crested duck  | <i>Lophonetta specularioides</i>       | ASS003 | F   | NR      | 0.892       | NR                          | NR            | Unable to perform PM - body eaten  | No PM report   | Open  | Open               | NA  | NA  | RB / FRS  |
| 80  | 03/07/2016    | 03/07/2016 | Avian other           | Western cattle egret     | <i>Bulbulcus ibis ibis</i>             | BIO011 | F   | NR      | NR          | Yellow                      | NR            | Unable to perform PM - body eaten  | No PM report   | Open  | Open               | NA  | NA  | RB / FRS  |
| 81  | 03/07/2016    | 03/07/2016 | Avian other           | Western cattle egret     | <i>Bulbulcus ibis ibis</i>             | BIO002 | UNK | NR      | 0.24        | NR                          | NR            | Euthanased, broken top beak  | Piece of top beak broken, either caught or done by another animal (JC - fractured maxilla, approx 1/3 length from rostral point, no obvious injuries to mandible)  | Fractured maxilla   | Conspecific injury | NA  | NA  | RB / FRS  |
| 82  | 04/07/2016    | 04/07/2016 | Avian other           | Sacred ibis              | <i>Threskornis aethiopicus</i>         | TA0033 | UNK | NR      | 1.58        | Blue AW                     | African field | Found dead in African field, broken beak   | Beak broken in several places, either caught or done by another animal, no other signs of injury or PM findings. (JC: mandible fractured left just rostral to eye, right 1/3 from rostral end fracture but genu intact, possible fracture of maxilla where attaches to skull as angle looks odd).  | Fractured maxilla and mandible  | Conspecific injury | NA  | NA  | RB / FRS  |
| 83  | 12/07/2016    | 12/07/2016 | Mammal marsupial      | Parma wallaby            | <i>Macropus parma</i>                  | MP0132 | M   | 1y10m   | 2.4         | NR                          | NR            | NR   | Mesenteric abscess, right lung dark patches, good BCS, green liquid in stomach.  | Pancreatic necrosis and mesenteric abscessation   | Infectious         | Severe acute pancreatic necrosis, bronchointerstitial pneumonia, occasional granuloma in lung (parasitic) | NA  | RB / FRS  |
| 84  | 17/07/2016    | 18/07/2016 | Mammal Primate        | Common squirrel monkey   | <i>Saimiri sciureus</i>                | SS0040 | F   | 3y9m    | 0.905       | NR                          | NR            | Bleeding from vulva, blood clot in uterus - miscarriage. (JC - no actual Hx)   | Blood coming out of the vulva, PME performed mainly on reproductive system. Undeveloped foetus was found, uterine infection, blood clot and miscarriage.   | Septicaemia or septic shock due to foetus death and infection   | Infectious         | NA  | NA  | RB / FRS  |
| 85  | 20/07/2016    | 20/07/2016 | Mammal marsupial      | Western grey kangaroo    | <i>Macropus fuliginosus</i>            | MF0061 | F   | 10y6m   | 30 (est)    | NR                          | NR            | "Georgia" quiet three days before death.   | Molar infection left, osteomyelitis jaw  | Osteomyelitis jaw   | Infectious         | NA  | NA  | RB / FRS  |
| 86  | 21/07/2016    | 21/07/2016 | Mammal marsupial      | Western grey kangaroo    | <i>Macropus fuliginosus</i>            | MF0088 | M   | 8y1m    | 50 (est)    | NR                          | NR            | "Lindford" weight loss, drooling, was on treatment for a long time (see ZIMS), lasalolol, extra feed   | Chronic tooth infection, old age, wasting, no PM performed   | Dental disease, old age (JC - necrobacillosis)  | Infectious         | NA  | NA  | RB / FRS  |
| 87  | 22/07/2016    | 22/07/2016 | Avian Psittacine      | Southern mealy amazon    | <i>Amazona farinosa</i>                | AF0028 | M   | 10y     | 0.58        | NR                          | NR            | "Floyd": left eye pecked, wings down, only hours before dead. Given fluids.  | No PME findings, faecal sample sent to the lab.  | Open  | Open               | NA  | Candida sp  | RB / FRS  |
| 88  | 23/07/2016    | 24/07/2016 | Mammal marsupial      | Western grey kangaroo    | <i>Macropus fuliginosus</i>            | MF0136 | F   | 15y3m   | 30 (est)    | NR                          | NR            | "Maria" infected toe, swollen, alamycin LA 2 days prior to death, on 23/07/16. Found dead in the am.   | Good BCS, no signs of injury or disease and had been eating well and behaving normally prior to death. There were some areas of ecchymotic haemorrhage in her abdomen, and about 100ml of red/purple fluid. The intestinal tract was normal in appearance with normal food volume. Kidneys and spleen were normal. Liver slightly enlarged and mottled in appearance. Dramatic pathology was present in the chest, lot of red fluid in the thorax and pericardium, fibrin tags present, congested lungs. Acute pneumonia pathology in the lungs. Died from acute bacterial septicaemia, most likely Pasteurella infection as some as found in sheep, maybe able to use heptavac to protect them. | Pyothorax and acute pneumonia   | Infectious         | NA  | NA  | RB / FRS  |
| 89  | 27/07/2016    | 27/07/2016 | Avian other           | Sacred ibis              | <i>Threskornis aethiopicus</i>         | TA0019 | M   | 17y     | NR          | NR                          | NR            | Unable to perform PM - remains only  | Unable to perform PM - remains only  | Open  | Open               | NA  | NA  | RB / FRS  |
| 90  | 27/07/2016    | 27/07/2016 | Avian Psittacine      | Red and green macaw      | <i>Ara chloroptera</i>                 | AC0043 | F   | 17y     | 1.5         | NR                          | NR            | Chafed: sent to IZVG. Watery blood coming out of beak.   | IZVG acute coelomitis, egg retention / dystocia  | Egg coelomitis  | Anatomical         | NA  | Oviduct sent for microbiology - awaiting results                                    | RB / FRS  |
| 91  | 30/07/2016    | 31/07/2016 | Mammal Hoofstock      | West African giraffe     | <i>Giraffa camelopardalis</i>          | GC0015 | M   | 6y      | 800 (est)   | NR                          | NR            | Collapsed indoors and could not get up - JC - spayed legged and dog sitting, multiple attempts to support but left overnight to attempt to stand. Attempts made to support to get up overnight, euthanased the following morning. Shot gun to the head.  | Euthanased - shot gun. Samples submitted to IZVG, haemorrhagic lungs, 2 litres water in pericardium, foam in trachea and bronchi, liver, heart, lungs, granulomas around stomach and liver, faecal smudges to IZVG. Swabs of lungs and fomay tracheal material. Note pictures available.   | Euthanased - downer bull, (JC note: PM images show serous fat atrophy, whilst not cause of death similar to previous giraffes and raises concerns re nutrition: also noted trichuris not uncommon in both groups - risk long term). | Husbandry          | NA  | Awaiting histology  | RB / FRS  |
| 92  | 31/07/2016    | 01/08/2016 | Avian Sphenisciformes | Humboldt penguin         | <i>Spheniscus humboldti</i>            | SH0021 | F   | 7y      | NR          | NR                          | NR            | No abnormalities visible on gross PM, all organs appear normal, plenty of food in alimentary tract   | Open   | Open  | NA                 | NA  | RB  |           |
| 93  | 02/08/2016    | 02/08/2016 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                     | NA     | UNK | NR      | NR          | Josie's (JC assumed infant) | NR            | Severe bite injury to right elbow, forearm degloved, euthanased by AG  | No PM report   | Conspecific injury  | Conspecific injury | NA  | NA  | RB / FRS  |
| 94  | 02/08/2016    | 02/08/2016 | Avian anatidae        | European eider           | <i>Somateria mollissima mollissima</i> | SMM004 | F   | 3y      | NR          | Nlue BX                     | NR            | Foot caught in door in aviary, bones exposed in tarsus(JC). Kept inside for few days with bandage, euthanased by AG.   | No PM report   | TT injury   | RTA / Trauma       | NA  | NA  | RB / FRS  |
| 95  | 02/08/2016    | 02/08/2016 | Mammal Primate        | Common squirrel monkey   | <i>Saimiri sciureus</i>                | SS0047 | UNK | 1y10m   | NR          | 956000003036537             | NR            | Found behind radiator, unable to perform PME as body decomposed.   | No PM report   | Open  | Open               | NA  | NA  | RB        |
| 96  | 03/08/2016    | 03/08/2016 | Mammal Other          | Capybara                 | <i>Hydrochaeris palagonum</i>          | HH0018 | F   | NR      | NR          | NR                          | NR            | Attacked by other capybaras - kicked out of group. Clean and flush wounds - triblissen dart.   | Septicaemia from abscess and toe wound   | Conspecific injury  | Conspecific injury | NA  | NA  | RB / FRS  |
| 97  | 04/08/2016    | 05/08/2016 | Avian anatidae        | Fulvous whistling duck   | <i>Dendrocygna bicolor</i>             | DCB004 | M   | 5y      | 0.7         | Red DI                      | NR            | NR   | Right kidney black and green in colour, kidney failure   | Kidney failure  | Anatomical         | NA  | NA  | RB / FRS  |
| 98  | 09/07/2016    | 09/07/2016 | Avian other           | Western cattle egret     | <i>Bulbulcus ibis ibis</i>             | BIO019 | UNK | NR      | 0.3         | NR                          | NR            | NR   | Multifocal internal bleeding, airsacs, lungs bruised in back and legs, head, neck.   | No diagnosis (JC presume crashed)   | RTA / Trauma       | NA  | NA  | RB / FRS  |
| 99  | 10/08/2016    | 20/07/2016 | Avian Psittacine      | Yellow-naped Amazon      | <i>Amazona euopallata</i>              | AA0060 | M   | 7y      | 446         | 2 JPM closed ring           | NR            | 08/08/16 found in aviary and taken to the vet room where assessed by FRS and identified broken wing, RB coming in following day. FRS later that day provided analgesia (meloxicam 0.2ml - 720mg/ml) and left in cage over night. Found dead the next morning on AM checks. No copulation or other support. Initial PM assessment and record made at time of death, body discovered in fridge on 19/08/16 and full PME carried out prior to disposal. | Compound fracture of left radius and ulna  | Conspecific injury  | NA                 | NA  | RB / FRS / JC   |           |
| 100 | 16/08/2016    | 16/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |
| 101 | 16/08/2016    | 17/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |
| 102 | 16/08/2016    | 18/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |
| 103 | 16/08/2016    | 19/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |
| 104 | 16/08/2016    | 20/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |
| 105 | 16/08/2016    | 21/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |
| 106 | 16/08/2016    | 22/08/2016 | Mammal Carnivore      | African lion             | <i>Panthera leo</i>                    | NA     | UNK | 4 days  | NA          | NA                          | NR            | Management euthanasia due to facility suitable for 1.2 at most, with cubs took to 2.2.7. Healthy cubs and nothing wrong with them.   | Management euthanasia  | Management  | NA                 | NA  | RB  |           |

| No. | Date of death | Date of PM | Taxa              | Species                    | Species                         | ID      | Sex | Age   | Weight (kg) | Microchip             | Location        | Hx  | Gross findings  | Diagnosis   | Category           | Histology   | Microbiology  | Author    |
|-----|---------------|------------|-------------------|----------------------------|---------------------------------|---------|-----|-------|-------------|-----------------------|-----------------|---|---|---|--------------------|---|---|-----------|
| 107 | 16/08/2016    | 23/08/2016 | Mammal marsupial  | Red kangaroo               | <i>Macropus rufus</i>           | MIR0089 | NR  | NR    | NR          | Els                   | NR              | Euthanased by RB, infected eye, bad condition, lethargic, no appetite   | No PM report  | Infected eye  | Infectious         |   |   |           |
| 108 | 17/08/2016    | 18/08/2016 | Mammal Primate    | Common squirrel monkey     | <i>Saimiri sciureus</i>         | SS0051  | F   | NR    | NR          | 95600003039887        | NR              | Found dead on the evening of 17/08/16   | Good BCS, no signs of injury nor trauma. Liver was enlarged and mottled, other abdominal organs normal. There was a small amount of food in the stomach and normal faeces in the rectum. The thorax was full of fluid which was slightly red in colour and did not contain pus or fibrin. Lungs were slightly mottled in appearance but no areas of consolidation present. The heart and pericardium were grossly normal. Thought to be infectious. | Pleural effusion, hepatomegaly.   | Infectious         | CTDS  | CTDS  | RB        |
| 109 | 20/08/2016    | 22/08/2016 | Mammal Primate    | Ring tailed lemur          | <i>Lemur catta</i>              | LC0211  | M   | 4m    | 535         | None found            | NR              | Sneezing, coughing and retching, does have a wound on inside of right leg. Found dead. Multiple other lemurs similar clinical signs.  | Penetrating bite wound to the left thorax with pneumothorax and haemorrhage, severe pneumonia, especially the right with pleurisy   | Bite wound to chest with concurrent terminal pneumonia                            | Conspecific injury | Tissues sent to IZVG  | Lung swab / tissue sent for culture                           | JC / IZVG |
| 110 | 21/08/2016    | 22/08/2016 | Mammal Primate    | Red ruffed lemur           | <i>Varecia rubra</i>            | VVR039  | M   | 13y   | NR          | None found            | Tayra enclosure | Found partially eaten in the Tayra enclosure  | Covered in mud, severe damage to ventral cervical musculature and trachea, right scapula fracture, lungs and heart eaten, pericardium and hindlimb muscles eaten, NAD   | Predated  | Conspecific injury | NA - store  | NA  | JC        |
| 111 | 24/08/2016    | 24/08/2016 | Avian other       | Chilean flamingo           | <i>Phoenicopterus chilensis</i> | PC0016  | F   | NR    | 2.19        | Red PCN               | Flamingo        | Quiet last night and away from the group, checked first thing this morning and found dead. Presented and underwent PME immediately. No microchip and left dark Red PCN.   | Massive SC oedema and free fluid, right pectoral pale tan with haemorrhage overlying the infrapinnatus muscle, left normal. NAD on coelomic examination.  | Trauma and subsequent ischaemia of the right pectoral                             | RTA / Trauma       | Sent to IZVG  | NA  | JC / IZVG |
| 112 | 24/08/2016    | 24/08/2016 | Avian other       | Black-crowned night heron  | <i>Nycticorax nycticorax</i>    | NNX001  | F   | 5y    | 0.437       | 6/NO/82/7ZHU          | Tambopatha      | Fractured right hind approx 6 months previously, unable to catch during that time. Went into house last night and caught up for assessment. Eating well. Malunion of the right femur with lateral deviation of limb but functional, unfortunately the left distal limb had severe bumblefoot and euthanased. IV penbarbitone. | Dislocated right stifle with relatively firm pseudarthrosis of TT with mid third distal femur laterally, very little movement. Left hind lateral digit (IV) large swollen bumblefoot lesion, lesser so digit III and II.  | Euthanased for bumblefoot as a result of malunion right stifle - likely traumatic | RTA / Trauma       | NA  | JC  |           |
| 113 | 25/08/2016    | 25/08/2016 | Avian anatidae    | White faced whistling duck | <i>Dendrocygna viduata</i>      | NA      | M   | DIS   | Not weighed | Egg labelled 29/07/16 | NR              | Found DIS soon after hatching, membranes dried and bill stuck on edge of shell.   | Started to pip but bill stuck and hooked on shell, membranes had dried and sealed the bird in the egg overnight, on opening NAD, healthy yolk sac and no evidence of other pathology.   | Failure to pip DIS  | Still born / DIS   | NA  | NA  | JC        |
| 114 | 29/08/2016    | 31/08/2016 | Mammal Primate    | BW ruffed lemur            | <i>Varecia varecia varecia</i>  | VVV079  | M   | 3m    | 0.95        | Mahiti                | Top house       | Died following period of diarrhoea, clear watery diarrhoea with undigested food, dull and listless, responded well to conservative treatment, little quiet yesterday and found dead this am.  | IZVG: Enterocolitis with diarrhoea and flagellate overgrowth, mild multifocal gastric ulceration. Otherwise NAD.  | Trichomoniasis enterocolitis and E.coli septicemia                                | Infectious         | Acute neutrophilic enteritis (SI), acute fibrinous splenitis, acute interstitial pneumonia.   | Non-haem E.coli (heavy), alpha haem streptococcus (moderate). | IZVG      |
| 115 | 29/08/2016    | NR         | Mammal Primate    | Ring tailed lemur          | <i>Lemur catta</i>              | LC0182  | F   | NR    | 0.7         | No microchip          | NR              | Bite wounds euthanased - large wound top inner left thigh, no use of leg. Euthanased by vet.  | No PM report  | Massive trauma from bites   | Conspecific injury | NA  | NA  | No vet    |
| 116 | 31/08/2016    | 01/09/2016 | Mammal Primate    | Ring tailed lemur          | <i>Lemur catta</i>              | LC0183  | M   | 3y    | 2.5         | 95600008250904        | NR              | Quiet, lethargic and distant from group, not eating much, found dead in am.   | IZVG: icterus (whole body), acute multifocal ecchymotic haemorrhages lungs, acute multifocal petechial to ecchymotic haemorrhages heart.  | ?Babesiosis, cu/Zn toxicity, other  | Open               | acute multifocal haemorrhage with fibrinous interstitial pneumonia, minimal hepatitis, nephritis, mild haemosiderosis, lymphoid depletion. Cause of jaundice enigmatic. | NPV   | IZVG      |
| 117 | 04/09/2016    | 06/09/2016 | Mammal Primate    | Ring tailed lemur          | <i>Lemur catta</i>              | LC0197  | M   | 1y    | 1.8         | 95600001538637        | NR              | Curled up on floor, disorientated, eyes glazed over. Found dead. Given fluids   | IZVG: icterus (whole body), acute multifocal ecchymotic haemorrhages lungs, acute multifocal petechial to ecchymotic haemorrhages heart, mild SC oedema thorax.   | ?Babesiosis, cu/Zn toxicity, other  | Open               | acute multifocal haemorrhage with fibrinous interstitial pneumonia, minimal hepatitis, nephritis, mild haemosiderosis, lymphoid depletion. Cause of jaundice enigmatic. | NPV   | IZVG      |
| 118 | 05/09/2016    | 05/09/2016 | Avian anatidae    | Fulvous whistling duck     |                                 | DB0003  | UNK |       |             |                       |                 | Unable to perform PM - body eaten   | No PM report  | Body eaten  | Open               | NA  | NA  | FRS       |
| 119 | 01/09/2016    | 04/09/2016 | Avian Galliformes | Domestic turkey            |                                 | MG0001  |     |       |             |                       |                 | Body found between bushes, decomposed and eaten by maggots.   | No PM report  | Open  | Open               | NA  | NA  | FRS       |
| 120 | 08/09/2016    | 09/09/2016 | Mammal marsupial  | Brush tailed rat kangaroo  | <i>Bettongia penicillata</i>    | MR0083  | F   | 6y6m  | 0.65        |                       |                 | Burnt abscess on face, lethargic, euthanased by RB, abscess involving eye and jaw.  | Right eye pthiasis, abscess on mandible and maxilla left, pregnant joey found at PME  | Necrobacillosis, pregnant   | Infectious         | NA  | NA  | RB        |
| 121 | 10/09/2016    | 10/09/2016 | Avian other       | Scarlet ibis               |                                 | ER0004  | M   | 9y    | 0.9         | 250229600046322       | Tropical house  | Found dead in Tambopatha aviary after a heavy night of rain   | Body and feathers totally wet, face, brain and neck muscles, lung and heart eaten (appears rats - JC), viscera remaining normal, no food in ventriculus, no diagnosis can be made on these PM findings due to lack of organs  | Open (exposure? PM scavenging)  | Open               | NA  | NA  | FRS       |
| 122 | 12/09/2016    | 12/09/2016 | Mammal Primate    | Red ruffed lemur           | <i>Varecia rubra</i>            | VVR005  | M   | 13y   | NA          |                       | Tiger enclosure | No PM done - found remains in tiger enclosure (pelt in faeces)  | No PM report - image of fur in faeces   | Eaten by tiger  | Conspecific injury | NA  | NA  | FRS       |
| 123 | 19/09/2016    | 19/09/2016 | Avian Galliformes | Domestic chicken           | <i>Gallus gallus</i>            | GD001   | M   | Adult | 4.3         | Green WU              | Play area       | Found dead under tree   | Urates topH throughout coelom, especially pericardium, bilateral renomegaly.  | Visceral gout   | Anatomical         | NA  | NA  | JC        |

| No. | Date of death | Date of PM | Taxa              | Species                      | Species                            | ID     | Sex | Age  | Weight (kg) | Microchip       | Location | Hx  | Gross findings  | Diagnosis   | Category           | Histology   | Microbiology            | Author |
|-----|---------------|------------|-------------------|------------------------------|------------------------------------|--------|-----|------|-------------|-----------------|----------|---|---|---|--------------------|---|-------------------------|--------|
| 1   | 04/01/2015    | 04/01/2015 | Avian Galliformes | Brown eared pheasant         | <i>Crossoptilan manichuricum</i>   | CM0002 | UNK | NR   | 1.89        | Green ZZ (left) | NR       | Has been attacked by the other birds, hasn't been eating since the attack. Given meloxicam 0.2ml (7mg/ml) and enrofloxacin 0.6ml (presume 25mg/ml)  | Very poor and thin condition with no muscle, injuries and wounds on head and wing with missing feathers. Visible haematoma on neck area. Transparent mucous inside beak. Fracture could be felt by touching on the frontal bone, some food in GIT, yellow liquid in crop and proventriculus, liver NAD, air sacs NAD, heart NAD.  | Cause of death due to injuries and bleeding on head caused by fighting with other birds, no need for further investigation.   | Conspecific injury | NA  | NA                      | FRS    |
| 2   | 05/01/2015    | 05/01/2015 | Mammal Primate    | Black and white ruffed lemur | <i>Varecia variegata variegata</i> | VVV077 | F   | 8m   | 1.7         | 95600003197379  | NR       | Unsteady on feet, not moving around much, kept losing grip when attempting to climb/jump, eyes unfocused, aggressive when approached, reluctant eat or drink, shivering/shaking, sloppy muck around back end.   | Dehydrated, no wounds observed, very thin condition, acute enteritis in whole GIT, bloody faeces in large intestines, bloody mucous content in stomach and small intestines. No food content was found in GIT. Bile content in stomach and oesophagus. Liver NAD.   | Acute enteritis and dehydration, possible due to bacteria, food poisoning or other poison   | Infectious         | NA  | Microbiology - negative | FRS    |
| 3   | 06/01/2015    | 06/01/2015 | Mammal Primate    | Black and gold howler monkey | <i>Alouatta caraya</i>             | AC0047 | M   | 10y  | 9.55        | 95600000009926  | NR       | "Marvin": lost weight rapidly, suddenly became very lethargic, very slow at moving and cautious. No new meds given, already on prednisolone 2 x5mg tablets eod.   | IZVG: marked disseminated necrosuppurative hepatitis consistent with <i>Yersinia pseudotuberculosis</i> , splenitis, lymphadenitis  | Yersiniosis   | NA                 | <i>Yersinia pseudotuberculosis</i> and 8ht growth of non-haemolytic <i>E.coli</i> | IZVG                    |        |
| 4   | 08/01/2015    | 09/01/2015 | Mammal Carnivore  | Banded mongoose              | <i>Mungos mungo</i>                | NR     | M   | NR   | 1.55        | 96800002323546  | NR       | Severe sarcopic mange, Ivermectin spot on 1 pipette   |   | Stress caused by catching for treatment   | Husbandry          | NA  | NA                      | FRS    |
| 5   | 09/01/2014    | 09/01/2014 | Mammal Other      | Capybara                     | <i>Hydrochaeris hydrochaeris</i>   | HH0010 | F   | 3    | 50 (est)    | NR              | NR       | Found dead with no signs of illness   | Externally NAD, on opening obvious large necrotic portion of bowel, volvulus of the ileum with ischaemia and one meter of necrotic small intestine. PM was only done to abdominal cavity due to obvious findings.   | Intestinal torsion  | Anatomical         | NA  | NA                      | FRS    |
| 6   | 25/01/2015    | 25/01/2015 | Avian other       | Black-crowned night heron    | <i>Nycticorax nycticorax</i>       |        | UNK | NR   | 0.4         | 528210002871779 | NR       | Very thin, not moving much, spending a lot of time on the ground with head backed under, not flying, not eating or drinking much, feathers missing across wings and chest/skin scabbed. Given 0.2ml enrofloxacin (presume 25mg/ml) x5 days and critical care oral bid x 10 days. Kept in indoor pen. (JC - not clear if died - it is a PM form but no details of death nor PM?) | No PM report  | Open  | Open               | NA  | NA                      | No vet |
| 7   | 28/01/2015    | 28/01/2015 | Avian anatidae    | Common pochard               | <i>Aythya ferina</i>               | AF0023 | M   | 5y7m | 0.23        | Red CR          | NR       | No sign of illness before found, but when found had been eaten by rats so wasn't anything to measure.   | No PM report  | Open  | Open               | NA  | NA                      | No vet |
| 8   | 28/01/2015    | 28/01/2015 | Avian other       | King vulture                 | <i>Sarcorampus papa</i>            | SP0007 | UNK | 5y   | 3.55        | 977170000059902 | NR       | Found in the aviary, not able to use its legs. Very shaky and slightly underweight, didn't look ill, just couldn't move its legs. Brought inside to gain heat but died shortly after.   | No PM report  | Open  | Open               | NA  | NA                      | No vet |
| 9   | 29/01/2015    | 28/01/2015 | Avian other       | Black swan                   | <i>Oxygnus atralus</i>             | CA0007 | F   | 18y  | 3.65        | 956000001225659 | NR       | Has swellings on the pads of her feet.  | No PM report  | Bumblefoot  | Anatomical         | NA  | NA                      | No vet |
| 10  | 04/02/2015    | 04/02/2015 | Mammal Hoofstock  | White rhino                  | <i>Ceratotherium simum simum</i>   | CS0007 | M   | 3y   | 1500 (est)  | Indiana         | NR       | Adult female rhino crushed him against barrier. Over next three days became very quiet, went off food, standing hunched and slow, reluctant to move. Surface wounds both shoulders. Given 1.5ml cortisone, monitored, died.   | A gross PM on site found the chest cavity full of red blood stained fluid. The abdominal contents were all grossly normal and the GIT was full of normal fibrous ingesta. These findings were consistent with the history of severe traumatic injury to the chest area with subsequent build up of blood and fluid around the lungs and heart. This eventually became excessive enough to cause death by severe restriction of respiratory and cardiac function.                                  | Conspecific injury, haemothorax   | Conspecific injury | NA  | NA                      | RB     |
| 11  | 13/02/2015    | 13/02/2015 | Mammal Carnivore  | Yellow mongoose              | <i>Cynictis penicillata</i>        | CP0030 | F   | NR   | 0.8         | 956000008229701 | NR       | Found dead in the enclosure with no previous signs of illness.  | Nomra BCS, missing left hind leg from previous amputation. Abdominal cavity - some food in the GIT, pale liver and enlarged kidneys, no relevant findings, thoracic cavity - heart normal, severe pleural effusion, evidence of pneumonia bilaterally with patches of purulent areas.   | Pneumonia   | Infectious         | NA  | NA                      | FRS    |
| 12  | 21/02/2015    | 21/02/2015 | Mammal Primate    | Ring tailed lemur            | <i>Lemur catta</i>                 | LC0057 | M   | 9y   | 2.2         | 00-0667-02DC    | NR       | "Austin" 14/2/15 swollen mandible, reluctant to move, but still eating. Following day had deteriorated. Swelling spread to face and he had no interest in his food. Fed CCF, enrofloxacin and pen/strep, 5 days no improvement. No mention if died or euthanased.   | Very swollen face especially in the right mandible, swollen submandibular LN. PM specifically on the head and neck. Inside oral cavity necrosis of the gum was observed, with bone exposure and osteomyelitis as well as infection of the tongue. Thorax and abdomen not assessed.  | Cause of death septicemia due to mouth infection and mandible necrosis in right side.   | Infectious         | NA  | NA                      | FRS    |
| 13  | 21/02/2015    | 21/02/2015 | Avian other       | Scarlet ibis                 | <i>Eudocimus ruber</i>             | ER0013 | UNK | NR   | 0.3         | 522052205280    | NR       | "THD0097 left leg"  | Bird was in very good condition, good muscle mass. No wounds nor injuries found. Ascites was observed in the abdominal and thoracic cavity, white paste inside GIT, fish inside ventriculus, congested muscle and tissue, enlarged liver, oedematous with fibrin adhered, heart enlarged with fibrin on pericardium, lungs congested and oedematous.  | Ascites associated with abnormally high blood pressure between the heart and lungs (pulmonary hypertension) leading to right heart failure, increased blood pressure in the veins, and excessive build up of fluid in the liver. (JC - this is unlikely considering the gross pathology findings) | Infectious         | NA  | NA                      | FRS    |
| 14  | 26/02/2016    | 26/02/2016 | Avian Galliformes | Lady Amherst's pheasant      | <i>Chrysolophus amherstiae</i>     | CAM008 | M   | 2y   | 0.7         | Red BV          | NR       | Attacked by other pheasants, causing abrasions to the head and a swollen eye. At this time the pheasant looked damp and fluffed up. Keep inside and warmed up.  | Very poor and thin condition with no muscle, injuries and wounds on head, neck and legs. Big puncture wound on neck with visible internal haematoma. Signs of internal bleeding on different parts of the body.   | Cause of death due to severe injuries and bleeding caused by fighting with other birds, no need for further investigation.  | Conspecific injury | NA  | NA                      | FRS    |
| 15  | 27/02/2016    | 28/02/2016 | Mammal Primate    | Hamadryas baboon             | <i>Papio hamadryas</i>             | NA     | M   | 2w   | 0.5         | NA              | NR       | Found being carried by mum after death.   | Animal was wet and very thin. No signs of wounds or injuries to body. Post mortem was done to thoracic cavity for suspected pneumonia, due to severe weather conditions. Thoracic cavity - heart in normal cavity. Heart in normal cavity. Severe pleural effusion. There was evidence in both lungs of a pneumonia with purulent patches.  | Pneumonia   | Infectious         | NA  | NA                      | FRS    |
| 16  | 28/02/2016    | 28/02/2016 | Avian Galliformes | White eared pheasant         | <i>Crossoptilan crossoptilon</i>   | CCR003 | M   | NR   | 1.45        | Blue DX         | NR       | Nervous, erratic behaviour, receiving aggression from other animals. Found drowned in stream.   | Very thin and poor condition. Injuries and wounds to head, missing skin on skull with bone exposure. Signs of internal local cervical bleeding, voluminous water logged lungs and air sacs. Presence of water in stomach and intestines.  | Cause of death due to severe injuries caused by fighting with other birds, fallen in stream very weak and drowned. No need for further investigation  | Conspecific injury | NA  | NA                      | FRS    |
| 17  | 01/03/2015    | 01/03/2015 | Mammal Chiroptera | Rodriguez fruit bat          | <i>Pteropus rodricensis</i>        | PR0060 | F   | NR   | 0.15        |                 | NR       | "Joanne"  | Good BCS, abdominal exam unremarkable, stomach empty, faeces in rectum normal. Both lungs mottled with areas of red/purple pathology indicative of an acute pneumonia.  | Pneumonia   | Infectious         | NA  | NA                      | No vet |
| 18  | 16/03/2015    | 16/03/2015 | Avian anatidae    | Ne-ne Southern crested grebe | <i>Branta sandvicensis</i>         | BS0018 | UNK | 10y  | 0.7         | Red GA          | NR       | Found dead in pond  | Unable to perform - body been eaten   | Open  | Open               | NA  | NA                      | No vet |
| 19  | 16/03/2015    | 16/03/2015 | Avian Galliformes | Southern crested grebe       | <i>Gullinula edouardi</i>          | GE0001 | M   | 10y  | 0.5         | Green CA        | NR       | Found dead in aviary  | Unable to perform PM - body eaten, probably old.  | Open  | Open               | NA  | NA                      | No vet |
| 20  | 16/03/2015    | 16/03/2015 | Avian Galliformes | Temminck's tragopan          | <i>Tragopan temminckii</i>         | TTR003 | M   | NR   | 0.7         | Blue CS         | NR       | Found dead in pond  | Bird was found dead in pond. Good body condition. Neck, trachea, oesophagus has been partially eaten. Crop exposed containing ingesta. Chest cavity full of blood and blood clots, abdominal organs were normal and digestive tract contained normal ingesta. Findings consistent with traumatic injury to the chest area with subsequent build up of blood around and inside lungs and heart, causing severe restriction of respiratory and cardiac function. No need for further investigation. | Trauma  | RTA / Trauma       | NA  | NA                      | FRS    |
| 21  | 21/03/2015    | 21/03/2015 | Avian anatidae    | North American wood duck     | <i>Aix sponsa</i>                  | AS0065 | NR  | NR   | 0.25        | Red DV          | NR       | Attacked by baboons   | No PM report  | Conspecific injury  | Conspecific injury | NA  | NA                      | No vet |
| 22  | 26/03/2015    | 26/03/2015 | Mammal Chiroptera | Rodriguez fruit bat          | <i>Pteropus rodricensis</i>        | PR0219 | NR  | NR   | 0.15        | 95600003201921  | NR       | Let outside into aviary, bad weather caused death.  | No PM report  | Hypothermia   | Husbandry          | NA  | NA                      | No vet |
| 23  | 26/03/2015    | 26/03/2015 | Mammal Chiroptera | Rodriguez fruit bat          | <i>Pteropus rodricensis</i>        | PR0218 | M   | NR   | 0.15        | 956000003192638 | NR       | Let into the outdoor aviary - found dead after the bad weather.   | Hypothermia   | Hypothermia   | Husbandry          | NA  | NA                      | No vet |
| 24  | 01/04/2015    | 01/04/2015 | Mammal Chiroptera | Rodriguez fruit bat          | <i>Pteropus rodricensis</i>        | PR0096 | F   | NR   | 0.5         | 968000004255943 | NR       | Bat house temps have been low recently, no other symptoms. Bat found dead in the am.  | Good body condition and no signs of external injury or disease. The liver was enlarged and there was a small amount of free fluid in the abdomen, this was red in colour. No food in the stomach and normal faeces in the rectum. Spleen and kidneys normal. Lungs and heart NAD.   | Acute hepatitis   | Infectious         | NA  | NA                      | RB     |
| 25  | 10/04/2015    | 11/04/2015 | Avian anatidae    | Ruddy shelduck               | <i>Tadorna ferruginea</i>          | LD0346 | F   | NR   | NR          | Blue BE         | NR       | Unsteady wheezing, given tribriksen 24% 5ml   | Good BCS, ascites was observed inside cavity, large amount of white yellowish fluid with clots of yellow material. Hepatomegaly, stiff liver consistency (fibrosis of liver), yellow pink colour. Mild splenomegaly and haemorrhagic enteritis with thickened intestinal wall. Pneumonia was observed in left lungs, white fluid in lungs and air sacs. Enlargement of the heart and inflammation on the surface of the heart. Right atrium and vena cava very dilated.                           | Ascites caused by cold because of enhanced blood flow through the lungs in an effort to produce endogenous heat and pneumonia   | Anatomical         | NA  | NA                      | FRS    |
| 26  | 11/04/2015    | 11/04/2015 | Reptile tortoise  | Red footed tortoise          | <i>Chelonoidis carbonaria</i>      | CCA001 | M   | NR   | 2.39        | "Basil"         | NR       | Cold, away from the heat, it had sunken eyes, very cold to touch and kept its eyes closed. Was not feeding properly.  | No signs of external wounds or body damage. Liver NAD, kidneys NAD, gall bladder NAD, no food content in stomach or GIT. Lungs and trachea NAD, heart NAD.  | Cause of death hypothermia due to being away from heat lamp and not feeding properly.   | Husbandry          | NA  | NA                      | FRS    |

| No. | Date of death | Date of PM | Taxa              | Species                    | Species                                  | ID      | Sex | Age  | Weight (kg) | Microchip        | Location                | Hx   | Gross findings  | Diagnosis   | Category           | Histology | Microbiology  | Author |
|-----|---------------|------------|-------------------|----------------------------|--|---------|-----|------|-------------|------------------|-------------------------|--|---|---|--------------------|-----------|---|--------|
| 27  | 12/04/2015    | 12/04/2015 | Avian other       | Chilean flamingo           | <i>Phoenicopterus chilensis</i>          | PCC008  | F   | 9y   | 1.9         | 250229600018480  | NR                      | Bad left leg, swollen knee joint, very weak and thin. Had enrofloxacin, meloxicam and OTC. Got weak, couldn't stand up, lost weight and died.  | Swelling of TMT joint, swelling of tibiofemoral joint, swelling of bilateral region. Deep wound on top of bilateral zone, with tendon and bone exposure. Infection and necrotic fibrosis observed on tibiofemoral joint, with necrotic femoral muscles.   | Cause of death due to severe leg infection and necrosis, no need for further investigation.   | RTA / Trauma       | NA        | NA  | FRS    |
| 28  | 12/04/2015    | 12/04/2015 | Avian anatidae    | Fulvous whistling duck     | <i>Dendrocygna bicolor</i>               | DB0004  | M   | NR   | NR          | 250228500017899  | NR                      | Green FY, pinned down by Egyptian goose  | Animal in good BCS, no visible external wounds seen, after removing skin, severe bruising and bleeding were observed in neck and chest area, being the worst part in pectoral muscles.  | Cause of death internal exsanguination due to other bird attacks. No need for further investigations                                    | Conspecific injury | NA        | NA  | FRS    |
| 29  | 13/04/2015    | 13/04/2015 | Avian anatidae    | Fulvous whistling duck     | <i>Dendrocygna bicolor</i>               | DB0001  | M   | NR   | NR          | 250228500017822  | NR                      | Blue XC  | Visible external wounds on left wing, after removing skin, severe bruising and bleeding were observed in neck and chest area, worst part in pectoral muscles.   | Cause of death internal exsanguination due to other birds attacks   | Conspecific injury | NA        | NA  | FRS    |
| 30  | 14/04/2015    | 14/04/2015 | Avian Galliformes | Temminck's tragopan        | <i>Tragopan temminckii</i>               | TTR001  | F   | NR   | 1.05        | Blue band        | NR                      | Found with eye fully shut. Bird was found with head injuries, swollen face and eyes shut, was kept in vet room for 2 days until found dead, fluids administered.   | Poor BCS, severe head, face and eye injuries. Eyes had been pecked and were infected. Haemorrhage observed in neck and head.  | Cause of death due to severe head and neck injuries caused by another bird. No need for further investigation.                          | Conspecific injury | NA        | NA  | FRS    |
| 31  | 17/04/2015    | 17/04/2015 | Avian Psittacine  | Blue and yellow macaw      | <i>Ara ararauna</i>                      | AA0064  | M   | 13   | 0.65        | 956000008246990  | NR                      | Shivery few days prior to death, after heavy rain.   | Bird was in poor body condition, very thin. Liver NAD, no food at all was found in crop, gizzard or GIT, kidneys NAD, gall bladder NAD, lungs and trachea NAD, heart NAD  | Anorexia following hypothermia and exposure   | Husbandry          | NA        | Faecal screen - negative salmonella, capnocybacter, other bacterial and fungal pathogens. | FRS    |
| 32  | 18/04/2015    | 18/04/2015 | Reptile tortoise  | Hermann's tortoise         | <i>Testudo hermanni</i>                  | TH0038  | F   | NR   | 0.236       | 9560000008246900 | Outside small tortoises | Sunken eyes, pale skin, eyes closed, cold to touch, brought inside and was on five day course of amikacin  | No signs of wounds or external body damage, liver NAD, kidneys NAD, gall bladder NAD, no food content in stomach or GIT, lungs and trachea NAD.   | Cause of death hypothermia due to being away from the heat lamp and not feeding properly.   | Husbandry          | NA        | NA  | FRS    |
| 33  | 19/04/2015    | 19/04/2015 | Mammal Carnivore  | Fennec fox                 | <i>Vulpes zerda</i>                      | VZ0001  | M   | 8y   | 0.85        | 0000099F3E       | NR                      | No signs of illness, prednisolone 1mg eod and 4ml of zoederm spread over AM and PM food. Multiple treatments due to a skin condition. Treated with ivermectin for mites, baths with malaseb shampoo, seems to work but then got worse. Prednisolone 1mg as a last attempt to improve skin.   | Very poor BCS, thin although it was eating OK. Externally animal had alopecia in chest, abdomen, legs, paws, with thin crusty, dry skin. Dark grey abdominal area observed in peritoneum, gray kidneys and very dark liver were observed. Stomach content and GIT content were present. Pale pink lungs were observed.  | Cause of death suspect to be Cushing's disease and making it worse with corticosteroid treatment, hyperadrenocorticism - kidney failure | Anatomical         | NA        | NA  | FRS    |
| 34  | 20/04/2015    | 20/04/2015 | Avian Galliformes | Golden pheasant            | <i>Chrysolophus pictus</i>               | CP015   | F   | UNK  | 0.75        | Green JN         | NR                      | Bird was found dead with no abnormal symptoms noted prior to death.  | Gross egg peritonitis present with two intact egg yolks and liquefied egg yolk present in the abdominal cavity, pieces of egg shell were present and rupture of the oviduct was observed. All other organs were grossly normal. Bird was in good condition, normal SC fat layer and gut contents.   | Cause of death was from shock from ruptured oviduct and egg peritonitis.  | Anatomical         | NA        | NA  | FRS    |
| 35  | 24/04/2015    | 24/04/2015 | Avian Galliformes | Temminck's tragopan        | <i>Tragopan temminckii</i>               | TTR007  | M   | NR   | NR          | Blue AF          | NR                      | Found in water in mineshaft, partially eaten.  | Good body condition body has been partially eaten. Crop and gizzard containing ingesta, water content in lungs and trachea. Abdominal organs were normal and digestive tract contained normal ingesta.  | Drowned   | Husbandry          | NA        | NA  | FRS    |
| 36  | 25/04/2015    | 25/04/2015 | Mammal Primate    | Cotton top tamarin         | <i>Saguinus oedipus</i>                  | SO0060  | F   | 2y   | 0.5         | 956000010370365  | NR                      | Socks was kicked out of the group by the other tamarins, they had restricted her access to food. The keepers tried to feed her separately where ever possible but this was not always successful.  | Animal was very thin, no fat or muscle mass was observed, she had minor scratches on face and some on different parts of the body, but no signs of major wounds. No food content was observed in the GIT  | Inanition, cold and shock   | Husbandry          | NA        | NA  | FRS    |
| 37  | 25/04/2015    | 25/04/2015 | Mammal Primate    | Ring tailed lemur          | <i>Lemur catta</i>                       | NA      | M   | 3w   | 0.216       | NR               | NR                      | Taken by other lemurs and killed   | No PME report   | Conspecific injury  | Conspecific injury | NA        | NA  | No vet |
| 38  | 25/04/2015    | 25/04/2015 | Mammal Primate    | Ring tailed lemur          | <i>Lemur catta</i>                       | NA      | M   | 41d  | 0.216       | NR               | NR                      | Attacked by another lemur  | No PME report   | Conspecific injury  | Conspecific injury | NA        | NA  | No vet |
| 39  | 25/04/2015    | 25/04/2015 | Mammal Primate    | Black lemur                | <i>Eulemur macaco macaco</i>             | LM011   | F   | 23d  | 0.103       | NR               | NR                      | Mother was neglecting the baby   | No PME report   | Inanition and cold  | Husbandry          | NA        | NA  | No vet |
| 40  | 25/04/2015    | 27/04/2015 | Mammal Chiroptera | Rodriguez fruit bat        | <i>Pteropus rodicensis</i>               | PR0206  | F   | NR   | 0.15        | 956000003045684  | NR                      | Found outside after severe weather   | No signs of wounds or external body damage, liver NAD, kidneys NAD, gall bladder NAD, no food content in GIT, lungs and trachea NAD, heart NAD.   | Cause of death hypothermia  | Husbandry          | NA        | NA  | FRS    |
| 41  | 25/04/2015    | 27/04/2015 | Mammal Chiroptera | Rodriguez fruit bat        | <i>Pteropus rodicensis</i>               | PR0128  | F   | NR   | 0.2         | 95600001233564   | NR                      | Found inside on the floor, no other symptoms.  | No signs of wounds or external body damage, liver NAD, kidneys NAD, gall bladder NAD, no food content in GIT, lungs and trachea NAD, heart NAD.   | Cause of death hypothermia  | Husbandry          | NA        | NA  | FRS    |
| 42  | 27/04/2015    | 27/04/2015 | Avian Galliformes | Temminck's tragopan        | <i>Tragopan temminckii</i>               | TTR002  | M   | NR   | 1.25        | Red CR           | NR                      | Found deceased and eaten in the stream.  | Unable to perform - body been eaten   | Open  | Open               | NA        | NA  | No vet |
| 43  | 28/04/2015    | 27/04/2015 | Mammal Primate    | Black and white lemur      | <i>Varecia variegata variegata</i>       | SL0386  | F   | 21   | 4.15        | 00-0061-CFB9     | NR                      | Jane Lay on back, blood from back end, tail also visible from back end, contraction appeared to have stopped and appeared exhausted. Given 0.8ml pentaprep and 0.2ml meloxicam. This lemur was giving birth with complications, with severe haemorrhage through vulva. Contractions stopped and it was exhausted, tried to pull baby slowly out but it ripped. It died half an hour later. | PME restricted to reproductive system, abdomen very swollen, 1 day after death. Uterus content 3 babies, immature, not fully grown for birth. First baby in crossed position and was less developed than other two, appeared to have been dead for a longer time blocking the birth passage. Severe endometrial haemorrhage was observed causing exsanguination. No need for further investigation. | Dystocia and endometrial tear/bleed   | Anatomical         | NA        | NA  | FRS    |
| 44  | 30/04/2015    | 30/04/2015 | Avian Galliformes | Lady Amherst's pheasant    | <i>Chrysolophus amherstiae</i>           | CAM007  | M   | NR   | NR          | Red AC           | NR                      | Found dead in bush area  | Unable to perform PM - body rotten and eaten  | Open  | Open               | NA        | NA  | FRS    |
| 45  | 30/04/2015    | 30/04/2015 | Mammal Primate    | Black lemur                | <i>Eulemur macaco macaco</i>             | LM0011  | F   | 8y   | 2.65        | 956000004254244  | NR                      | Her baby died, it was 20 days old, 1 day later she was ragging her tail on the floor and was slightly unsteady on her back legs. She was also slightly hunched. These symptoms persisted for three days prior to death. She was showing interest in food but appeared to be chewing it and playing with it, then spitting it back out rather than eating it.                               | Thick layer of SC fat in abdominal region, intra-abdominal fat, located inside the peritoneal cavity, unsteady on her back legs. She was also slightly hunched. These symptoms persisted for three days prior to death. She was showing interest in food but appeared to be chewing it and playing with it, then spitting it back out rather than eating it.  | Cause of death based on symptoms and PM observations fatty liver disease, cirrhosis, high cholesterol, arteriosclerosis, spinal stroke. | Anatomical         | NA        | NA  | FRS    |
| 46  | 08/05/2015    | 08/05/2015 | Avian Psittacine  | Green winged macaw         | <i>Ara chloroptera</i>                   | AC0060  | NR  | NR   | NR          | Silver ring left | NR                      | Caught up because wire stuck around foot, bad wheezing afterwards.   | No PM report  | Open  | Open               | NA        | NA  | No vet |
| 47  | 28/05/2015    | 28/05/2015 | Avian other       | Coccyzus erythrophthalmus  |  | CC00197 | NR  | NR   | 2.65        | 95600000325054   | NR                      | Found laid flat, still moving, feet and beak were very blue in colour  | Animal was frozen so only gross PM could be done, injuries observed on both wings. Cyanotic beak and feet and mucous. No food in crop or GIT. Lab test came clean for bacteriological diseases (JC faeces)  | Cause of death suspected hypothermia  | Husbandry          | NA        | Faeces - NAD  | No vet |
| 48  | 27/05/2015    | 27/05/2015 | Avian anatidae    | White faced whistling duck | <i>Dendrocygna viduata</i>               | DV0002  | NR  | NR   | 0.65        | NR               | NR                      | Found dead in aviary, puncture hole in head.   | Animal in good body condition, visible external wound in head, severe bruising and bleeding were observed in head with a big puncture hole  | Cause of death: due to other birds attack, no need for further investigation  | Conspecific injury | NA        | NA  | FRS    |
| 49  | 29/05/2015    | 29/05/2015 | Mammal Primate    | Black and white lemur      | <i>Varecia variegata variegata</i>       | VV0054  | F   | NR   | NR          | 956000001227077  | NR                      | Tetanic state, struggling to breathe. Tetanus, euthanased. Had been unwell and been treated for the past two days with antibiotics, its condition worsened and was in a totally tetanic state, euthanased.   | No PM report  | Tetanus   | Infectious         | NA        | NA  | RB     |
| 50  | 29/05/2015    | 29/05/2015 | Mammal marsupial  | Western grey kangaroo      | <i>Macropus fuliginosus</i>              | MF0050  | F   | NR   | NR          | 96700000628086   | NR                      | Swollen jaw. Has had a chronic molar infection for months, started losing weight and lethargic for a few days before dying. Treated with oxytetracycline LA 4 times, treatment changed to ceftriaxone for 10 days with no improvement. Swelling of the right side of the face with bad odor and obvious pain were observed.  | Very obvious pathology was restricted to the mandibular bone, necrotic tissue around teeth and gum, fibrotic granuloma and teeth decay were observed. All internal organs were in normal condition.   | Cause of death was septicaemia due to chronic infection.  | Infectious         | NA        | NA  | FRS    |
| 51  | 29/05/2015    | 29/05/2015 | Avian other       | Chilean flamingo           | <i>Phoenicopterus chilensis</i>          | NR      | F   | 9y4m | 1.65        | 250229600024823  | NR                      | Standing alone on some occasions but would join back up with the group throughout the day. The bird is quite thin, found dead by side of the flamingo pool.  | No PM report  | Open  | Open               | NA        | NA  | FRS    |
| 52  | 01/06/2015    | 01/06/2015 | Avian Galliformes | Nepal Kalij pheasant       | <i>Lophura leucomelanos leucomelanos</i> | LL001   | M   | NR   | 0.65        | Red AH           | NR                      | Seems underweight, lot of blood from mouth. This bird was attacked by other birds with visible injuries in different parts of the body.  | Injuries and wounds on head missing skin on skull with bone exposure, bleeding through beak, blood content in oral cavity, syringe, trachea, internal muscle rupture, with internal haematoma, in pectoral muscles and legs. Haemorrhagic chest cavity.   | Cause of death due to severe injuries caused by fighting with other birds, no need for further investigation                            | Conspecific injury | NA        | NA  | FRS    |
| 53  | 03/06/2015    | 03/06/2015 | Avian other       | King vulture               | <i>Sarcophagus papa</i>                  | SP0001  | F   | 10y  | 4           | NR               | NR                      | Found knocked out in aviary, bleeding from mouth and nasal area, bruising around head, bent tail, looked like an impact due to heavy winds right before.   | Externally an haematoma could be observed around the head, neck and face, this was clearly done by an impact against the mesh due to heavy winds the night before. No further investigations were done or were necessary due to no signs of other illness or infectious diseases  | Cause of death severe injuries of head and neck caused by trauma.   | RTA / Trauma       | NA        | NA  | FRS    |
| 54  | 05/06/2015    | 05/06/2015 | Mammal Primate    | Cotton top tamarin         | <i>Saguinus oedipus</i>                  | SO0040  | F   | 8y   | 0.508       | 956000001659323  | Lemur section           | Little subdued   | No PM report  | Open  | Open               | NA        | NA  | No vet |



| No. | Date of death | Date of PM | Taxa                  | Species                      | Species                            | ID     | Sex | Age       | Weight (kg) | Microchip       | Location            | Hx  | Gross findings  | Diagnosis  | Category           | Histology  | Microbiology   | Author          |            |
|-----|---------------|------------|-----------------------|------------------------------|------------------------------------|--------|-----|-----------|-------------|-----------------|---------------------|---|---|--|--------------------|--|--|-----------------|------------|
| 55  | 06/06/2015    | 06/06/2015 | Reptile tortoise      | Leopard tortoise             | <i>Stigmochelys pardalis</i>       | GP0001 | UNK | UNK       | 3.01        | 95600001338097  | Lemur section       | "Snoty, pale skin, no weight loss, seen eating, sunken eyes, lethargic. Tx. enrofloxacin 7 days, amakacin 14/07/15. The tortoise was found cold, away from the heat, very cold to the touch, tortoise was snoty and wheezy, staying outside and unable to keep it on 30 degrees.  | No signs of wounds, or external body damage, liver NAD, kidneys NAD, gall bladder NAD, no food in stomach or GIT, lungs and trachea NAD, heart NAD.   | Cause of death unable to keep at 30 degrees inside enclosure, lack of UV rays.   | Husbandry          | NA   | NA   | FRS             |            |
| 56  | 07/06/2015    | 07/06/2015 | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0200 | M   | NR        | 0.25        | 95600008250768  | NR                  | None known prior to death. Found on mesh of aviary, bleeding from eyes, suspected rat poisoning, bleeding mucosae   | No PM report  | Suspect rodenticide poisoning (JC ddx trauma)  | Husbandry          | NA   | NA   | No vet          |            |
| 57  | 14/06/2015    | 14/06/2015 | Mammal marsupial      | Parma wallaby                | <i>Macropus parma</i>              | MP0123 | M   | 4         | 4.6         | 95600001227794  | NR                  | Reported to have missing bits of coat, 08/06/15, increasing alopecia 09/06/15, clinically suspected sarcoptic mange.  | No PM report but histo report summarises sarcoptic mange, haemorrhagic lungs, abdominal bloating and seizures minutes before death.   | Open   | Open               | Liver autolysis, lung, autolysis - no dx. Tissues were sent fresh not in formalin.                                     | heavy growth non-haem E.coli and enterococcus faecalis, light growth of clostridium, no salmonella | IZVG            |            |
| 58  | 24/06/2015    | 24/06/2015 | Mammal Other          | Linne's two toed sloth       | <i>Choloepus didactylus</i>        | CD0002 | F   | NR        | 3.45        | "Stella"        | NR                  | Bloated and weak, responded OK to treatment (tribissen and buscopan), then found dead.  | No abnormal findings, white spots on liver, sent for further work up.   | Biliary adenoma, liver (incidental)  | Open               | Open   | Biliary adenoma, antrivascularitis.  | Cryptosporidium | FRS / IZVG |
| 59  | 25/06/2015    | 25/06/2015 | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0199 | M   | NR        | NR          | 95600008246347  | NR                  | No Hx   | No PM report  | Open   | Open               | NA   | Profuse growth of mixed anaerobes in faeces  | No vet          |            |
| 60  | 25/06/2015    | 26/06/2015 | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0198 | F   | NR        | 0.15        | 95600008246347  | NR                  | Unable to perform - body eaten  | No PM report  | Open   | Open               | NA   | NA   | No vet          |            |
| 61  | 29/06/2015    | 29/06/2015 | Avian Sphenisciformes | Humboldt penguin             | <i>Spheniscus humboldti</i>        | SH0031 | NR  | 1m24d     | 1.95        | 95600005547653  | NR                  | Being picked on by its parents, large scab seen on its back.  | Big back wound  | Rejected and pecked at by parents  | Conspecific injury | NA   | NA   | No vet          |            |
| 62  | 15/07/2015    | 15/07/2015 | Avian other           | White stork                  | <i>Ciconia ciconia ciconia</i>     | CCC031 | M   | 2         | 2.8         | 95600002952084  | NR                  | "Elton" broken wing, tried to amputate, died during surgery loss of blood   | No PM report  | Loss of blood, broken wing with bone exposure  | RTA / Trauma       | NA   | NA   | RB              |            |
| 63  | 16/07/2015    | 16/07/2015 | Avian Psittacine      | Orange winged amazon         | <i>Amazona amazonica</i>           | AA0074 | NR  | NR        | 0.3         | "gizmo"         | NR                  | Neurological symptoms, head turning, enrofloxacin and itraconazole x 3 days, then euthanased by vet   | No PM report  | Open (JC - ddx heavy metal, infectious, trauma, etc)   | Open               | NA   | Faeces sent - negative including Chlamydia   | No vet          |            |
| 64  | 21/07/2015    | 21/07/2015 | Reptile tortoise      | African spurred tortoise     | <i>Centrochelys sulcata</i>        | GS0014 | M   | NR        | 34.2        | 528210000928817 | NR                  | "Goliath" found in AM looking the electric fence in the enclosure - electrocuted.   | No PM report  | Electrocuted   | Husbandry          | NA   | NA   | RB              |            |
| 65  | 28/07/2015    | 28/07/2015 | Mammal Hoofstock      | Reindeer                     | <i>Rangifer tarandus</i>           | RT0008 | M   | 5         | 40          | "Suka"          | NR                  | First came in with flystrike on head, next morning very bloated and breathing hard - could not lift feet. Cut into rumen to release gas, lots of liquid and gunk came out, breathign still heavy next day. Oxytel, bute, fluids.  | Animal presented with ruminal tympany and was in lateral recumbency for a day, and will not stand up. Rumenotomy was performed successfully, gas and foam were able to escape and the bloating was relieved. The reindeer looked a lot better the next day but two days later was breathign with difficulty. Animal died 3 days post intervention. JC - No actual PM report   | Ruminal tympany  | Anatomical         | NA   | Sbonye ova <200epg   | FRS             |            |
| 66  | 29/07/2015    | 30/07/2015 | Avian Psittacine      | Blue and yellow macaw        | <i>Ara ararauna</i>                | AA0029 | M   | 20y       | 0.055       | MC0006338E42    | NR                  | "Paisley" found dead this morning, no symptoms of disease or illness had been noted prior to death.   | Bird in good BCS, lungs, airsacs, heart, liver, kidney, GIT were all grossly normal. No food in upper GIT, lower parts of intestine contained small volume of brown/green semi solid faeces. Cloaca full of runny greenish brown liquid excreta.  | Open   | Open               | NA   | Faecal screen negative for all pathogens tested.   | RB              |            |
| 67  | 29/07/2015    | 29/07/2015 | Mammal marsupial      | Red kangaroo                 | <i>Macropus rufus</i>              | MR0088 | F   | 3m        | 3.25        | 956000003117264 | NR                  | "Adon" injected by mother, liver fluids, cold wet rights outside, not feeding properly, skinny, got snoty, wheezy and dehydrated, losing weight   | Externally animal looked very thin and dehydrated, GIT small amounts of ay content and semi digested pellet in stomach, no content in intestines, yellow mucous in trachea and lungs was observed, with oedematous lungs, no other findings were observed   | Cause of death rejected by mother, hypothermia and lung infection  | Husbandry          | NA   | NA   | FRS             |            |
| 68  | 03/08/2015    | 03/08/2015 | Mammal Primate        | Spider monkey                | <i>Ateles fusciceps robustus</i>   | AFR001 | M   | NR        | 6.9         | 95600003024546  | NR                  | Wound on left thigh was stitched back up - chest wound across entire chest. Wounds were treated, animal did not survive anaesthesia after surgery.  | No PM report  | Cause of death fight wounds, desanguination, didn't come out of anaesthesia  | Conspecific injury | NA   | NA   | No vet          |            |
| 69  | 04/08/2015    | 04/08/2015 | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0188 | M   | NR        | 0.25        | 95600008229277  | NR                  | Animal found on floor with big wound in left wing, put in vet room, died over night, focal haemorrhage  | No PM report  | Trauma   | RTA / Trauma       | NA   | NA   | No vet          |            |
| 70  | 05/08/2015    | NR         | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0208 | M   | NR        | 0.244       | NR              | NR                  | Found dead, still hanging on mesh, blood down his front but no wounds. This bat was found to be weak in the indoor housing, taken to the vet room for monitoring - three others have died in the past few weeks. Given pen/step 0.2ml 1 day before death.   | IZVG PME: focally extensive acute SC and IM haemorrhage, left sided head, suggestive acute trauma, possibly underlying pathology  | Acute trauma   | RTA / Trauma       | Histo sent but no report found   | Liver bacteriology - incidental bacteria, little significance                                      | IZVG            |            |
| 71  | -             | -          | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0189 | F   | NR        | 0.15        | 95600008265650  | NR                  | No Hx   | No PM report  | Open   | Open               | NA   | NA   | No vet          |            |
| 72  | 10/08/2015    | 10/08/2015 | Mammal Chiroptera     | Rodriguez fruit bat          | <i>Pteropus rostricentris</i>      | PR0207 | F   | NR        | 0.225       | NR              | NR                  | No Hx   | No PM report  | Open   | Open               | NA   | NA   | No vet          |            |
| 73  | 12/08/2015    | 12/08/2015 | Mammal Primate        | Ring tailed lemur            | <i>Lemur catta</i>                 | LC0201 | M   | 4m        | 0.62        | 956000001518713 | NR                  | "Obayn" Down, curled up, glazed look, head to the side, head controls worsened, unable to use limbs, CCF, enrofloxacin, meloxicam then tribissen, prednisolone and then euthanased the next day   | IZVG - severe focally extensive suppurative meningioencephalitis, right frontal cerebral hemisphere, brain  | Meningitis   | Infectious         | Focally extensive severe acute suppurative encephalomalacia with large intralosomal bacterial colonies, brain          | Brain swabs - no aerobic bacteria after 48hrs  | IZVG            |            |
| 74  | 19/08/2015    | 23/08/2015 | Avian other           | Turkey vulture               |                                    |        | UNK | NR        | 1.15        | 95600002949987  | NR                  | Potentially dislocated hip. The bird had been recently removed from quarantine to vulture aviary. It was being picked by the other birds. Could not walk or fly properly - was found dead with several wounds to head and wings.  | Right sid femur dislocated from acetabulum, trachea, lungs and heart in normal condition. All abdominal organs were in good condition, no food found in oesophagus, crop, gizzard or intestines.  | Cause of death possible lack of feeding, pain and immobility due to dislocated hip, no need for further investigation  | Conspecific injury | NA   | NA   | FRS             |            |
| 75  | 24/08/2015    | 24/08/2015 | Reptile tortoise      | Spur thighed tortoise        | <i>Testudo graeca</i>              | TG0046 | F   | NR        | 2.75        | 956000008262374 | NR                  | "Liby": snoty nose, loss appetite, weight loss, back right leg infection, pus coming out of wound. Enrofloxacin 1ml.  | No PM report  | Septicemia, big infection in back right leg, purulent discharge with strong odour  | Infectious         | NA   | NA   | RB              |            |
| 76  | 30/08/2015    | 31/08/2015 | Avian other           | Little egret                 | <i>Egretta garzetta</i>            | EG0023 | F   | 14y       | 0.25        | NR              | NR                  | No Hx   | No PM report  | Open   | Open               | NA   | NA   | RB              |            |
| 77  | 02/09/2015    | 02/09/2015 | Avian anatidae        | Patagonian crested duck      | <i>Lophonetta specularioides</i>   | NR     | NR  | 2m        | NR          | Red AE          | NR                  | Unsteady walking not eating, lameness   | NAD on PM (no reprod. just notes), sample taken to lab, possible nutritional deficiency   | Open   | Open               | NA   | Faecal culture no pathogens detected   | FRS             |            |
| 78  | 04/09/2015    | 04/09/2015 | Mammal Other          | Mara                         | <i>Dolichotis palanotum</i>        | DPT003 | M   | 7y6m      | 6.9         | 98000004434643  | NR                  | Bloated, stiffness, seizures, treated with 1ml tribissen, 1ml buscopan and fluid therapy. Next day was very stiff, had seizures and died 2 days after onset of symptoms   | No wounds were observed, animal in good body condition, severely bloated, some internal bleedings were observed, petechiae in the lungs   | Tetanus  | Infectious         | NA   | NA   | FRS             |            |
| 79  | 10/09/2015    | 10/09/2015 | Mammal Primate        | Ring tailed lemur            | <i>Lemur catta</i>                 | NA     | M   | 2m        | 0.23        | NA              | NR                  | Puncture wound on chest   | No PM report  | Puncture wound on chest from other lemur   | Conspecific injury | NA   | NA   | No vet          |            |
| 80  | 12/09/2015    | 13/09/2015 | Mammal Hoofstock      | Nyala                        | <i>Tragelaphus angasi</i>          | TGA006 | F   | 12y       | 40          | NR              | NR                  | Animal arrived at SL52 10/09/15, it was released into the field under normal procedures the next day. As soon as it was released it went into a panic, stressful stage, disoriented, paralysed and standing in a corner without moving and then going into shock. It died minutes after being released, no signs of injuries or diseases were observed at the moment. Sudden death. | Animal in good BCS, no wounds, injuries or haematomas evident. Normal food and content inside rumen, GIT unremarkable, liver smooth surfaces, uniform mid brown parenchyma and sharp edges. Abdominal cavity unremarkable. Respiratory system lung spiggy, dark pink, red uniform cut surfaces, pleura unremarkable. CV system heart myocardial infarction on left ventricle, damage to the heart muscle was observed, kidneys NAD            | Myocardial infarction caused by coronary artery spasms, which may be due to significant emotional stress.  | Husbandry          | NA   | NA   | FRS             |            |
| 81  | 12/09/2015    | 12/09/2015 | Mammal Hoofstock      | Nyala                        | <i>Tragelaphus angasi</i>          | TGA004 | F   | 11y9m     | NR          | NR              | NR                  | Animal arrived at SL52 on 10/09/15 it was released into the field under normal procedures the next day. As soon as it was released it ran into a corner and stayed there shaking. It was found the next morning still alive, shaligin and lying down in the rain, animal was in shock and died 15 minutes later while trying to get her inside away from the rain.                  | Animal presented with multiple wounds and haematomas in legs and abdominal area, most of these were 2-3 days old (blue/purple colour), legs had lacerations in metatarsal and metatarsal zones, skin missing and scratches, big laceration in left femoral region. GIT normal food contents in rumen, liver smooth surfaces, uniform mid brown parenchyma, abdominal cavity unremarkable, heart unremarkable no heart muscle damage observed. | Shock, which is essentially the loss of heat and fluids from the body, a natural response to injury. Interaction with humans causes additional stress to a wild animal and this can kill an already shocked animal. Noise, new environment, new smells, transport and cold temperatures all contributed to the animal's stress. Then goes on to a long description of stages of shock - not reproduced here. | Husbandry          | NA   | NA   | FRS             |            |
| 82  | 13/09/2015    | -          | Mammal Hoofstock      | Nyala                        | <i>Tragelaphus angasi</i>          | TGA005 | F   | 9y        | NR          | NR              | NR                  | Just released into field  | No PM report  | Stress - shock (JC - these could actually be capture myopathy - but no histo undertaken)   | Husbandry          | NA   | NA   | FRS             |            |
| 83  | 18/09/15      | 21/09/2015 | Mammal Primate        | Black and white ruffed lemur | <i>Varecia variegata variegata</i> | VV0061 | M   | 4y        | NR          | 956000001205053 | Bottom ruffed house | Found in maned wolf enclosure   | No PM report  | Killed by maned wolves   | Conspecific injury | NA   | NA   | No vet          |            |
| 84  | 20/09/2015    | 21/09/2015 | Avian anatidae        | Bar headed goose             | <i>Anser indicus</i>               | AJ003  | F   | Adult     | 3.75        | NR              | NR                  | Animal very thin, liver covered in white dots, hard, enlarged, no other significant findings.   | Animal very thin, liver covered in white dots, hard, enlarged, no other significant findings.   | Avian mycobacteriosis  | Infectious         | multifocal necrogranulomatous hepatitis suggestive of mycobacteriosis, liver, hepatic amyloidosis. Acid fast positive. | NA   | IZVG            |            |
| 85  | 22/09/2015    | 25/09/2015 | Mammal Primate        | Ring tailed lemur            | <i>Lemur catta</i>                 | LC0198 | M   | 6m        | NR          | 956000001536119 | NR                  | "Smudge": damaged ankle, he was dragging the foot along the ground and wasn't using it. Euthanased by vet   | No PM report  | Damaged ankle - no details   | RTA / Trauma       | NA   | NA   | No vet          |            |
| 86  | 27/09/2015    | 27/09/2015 | Avian anatidae        | Bronze winged duck           | <i>Anas specularis</i>             | NR     | F   | 2y (nest) | 0.5         | Green AJ        | Main lake           | Found in main lake  | Unable to perform PM - decomposed and eaten   | Open   | Open               | NA   | NA   | No vet          |            |
| 87  | 02/10/2015    | 03/10/2015 | Mammal Carnivore      | Snow leopard                 | <i>Uncia uncia</i>                 | UU0004 | F   | 15w       | NR          | NR              | NR                  | "Miska": found partially eaten, suspected barbiturate poisoning   | Unable to perform PM - body eaten but blood sample to laboratory. No barbiturates found in blood - can find up to 36 hours post ingestion.  | Open (ddx barbiturate poisoning), eaten  | Conspecific injury | NA   | NA   | RB              |            |
| 88  | 03/10/2015    | 03/10/2015 | Mammal Carnivore      | Snow leopard                 | <i>Uncia uncia</i>                 | UU0003 | F   | 15w       | 3.8         | NR              | NR                  | "Natasja": Suspected barbiturate poisoning, euthanased as front left leg chewed/eaten   | Unable to perform PM - body eaten but blood sample to laboratory. No barbiturates found in blood - can find up to 36 hours post ingestion.  | Open (ddx barbiturate poisoning), eaten  | Conspecific injury | NA   | NA   |                 |            |

| No. | Date of death | Date of PM | Taxa                 | Species                  | Species                          | ID     | Sex | Age | Weight (kg) | Microchip       | Location        | Hx   | Gross findings  | Diagnosis  | Category           | Histology   | Microbiology   | Author |
|-----|---------------|------------|----------------------|--------------------------|----------------------------------|--------|-----|-----|-------------|-----------------|-----------------|--|---|--|--------------------|---|--|--------|
| 89  | 09/10/2015    | 09/10/2015 | Mammal<br>Hoofstock  | Giraffe                  | <i>Giraffa camelopardalis</i>    | NA     | F   | 13d | 53.5        | NR              | NR              | Runny yellow faeces, 3.5l of fluids, keep warm and fluids every 2 hours. 04/10/15 presented with profuse yellow diarrhoea associated with rapid dehydration for a week before dying on the 09/10/15. Was seen sucking but was lethargic, stressed, leaning against fences, weak and unsteady. Treated with fluids every 2 hours one day before death but was already dehydrated and unable to stand up, did not respond to fluid therapy. Faecal sample was taken when animal was still alive. (JC - no mention of antibiotics?) | PM was performed specifically to abdominal area and GIT system, large amount of mucus and ascites in abdominal cavity, large volume of food smelling clots of milk content (approx 2l) in abomasum, which mans calf was suckling normally. Inflamed abomasum seen with haemorrhage from the abomasal lining. Accumulation of fluid within the large intestine and extensive damage to the large intestinal mucosa with oedema, haemorrhage and erosion and ulceration of the mucosa with mucus in the lumen.  | Cause of death profuse amounts of liquid faeces were passed, and the calf rapidly became depressed and recumbent, followed by hypovolaemic shock and death. E.coli | Infectious         | NA  | Pure growth of E.coli and Enterococcus   | FRS    |
| 90  | 11/10/2015    |            | Avian other          | Roseate spoonbill        | <i>Platalea leucorodia</i>       | NA     | NR  | NR  | 0.95        | Green VP        | NR              | Fallen out of nest, lump on abdomen  | Externally looked very thin, had huge lump on abdomen area, felt hard at touch but went soft when manipulating it. Abnormal amount of different sized stones were found in the gizzard, animal was being fed stones by parents, no other food content was observed and the gizzards passage was totally blocked. Animal dehydrated and inanitated.  | Foreign body obstruction   | Anatomical         | NA  | NA   | FRS    |
| 91  | 14/10/2015    | 15/10/2015 | Mammal<br>Hoofstock  | Chinese muntjac          | <i>Muntiacus reevesi</i>         | MRR011 | F   | 12y | 13.3        | NR              | NR              | Animal found dead with no previous signs of illness.   | Good BCS, abdominal distension was noted, normal SC fat, over 3l of fluid observed inside abdomen, watery blood fluid, main observation was very enlarged cirrhotic liver with obvious necrosis and multifocal bleeding. Cirrhosis of the liver is the most common cause of ascites but other conditions such as heart failure, kidney failure, infection or cancer can also cause ascites. Ascites is caused by a combination of elevated pressure in the veins running through the liver (portal hypertension) and a decrease in liver function caused by scarring of the liver. Parasite test performed result negative to GIT parasites | Chronic liver disease  | Anatomical         | NA  | In house sodium nitrate faecal - NPV   | FRS    |
| 92  | 14/10/2015    | 14/10/2015 | Mammal<br>Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodicensis</i>       | PRO132 | F   | 8y  | 0.249       | 98800001735986  | NR              | No Hx  | IZVG: cardiomyopathy, pericardial and pleural effusion  | Congestive heart failure   | Anatomical         | NA  | NA   | IZVG   |
| 93  | 18/10/2015    | 19/10/2015 | Mammal<br>Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodicensis</i>       | PRO151 | M   | NR  | 0.246       | NR              | NR              | No Hx  | No PM report  | Open   | Open               | NA  | NA   | No vet |
| 94  | 18/10/2015    | 19/10/2015 | Mammal<br>Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodicensis</i>       | PRO146 | F   | NR  | 0.224       | NR              | NR              | No Hx  | No PM report  | Open   | Open               | NA  | NA   | No vet |
| 95  | 21/10/2015    | 21/10/2015 | Avian anatidae       | Ferruginous duck         | <i>Aythya nyroca</i>             | AN0021 | M   | NR  | 50          | NR              | NR              | No Hx  | Unable to perform - body been eaten   | Open   | Open               | NA  | NA   | No vet |
| 96  | 22/10/2015    | 22/10/2015 | Mammal<br>marsupial  | Parma wallaby            | <i>Macropus parma</i>            | MP0131 | M   | NR  | 2.3         | 956000003197574 | NR              | No Hx  | Enlarged pancreas with white nodules.   | Pancreatitis   | Anatomical         | NA  | NA   | RB     |
| 97  | 26/10/2015    | 26/10/2015 | Mammal<br>Primate    | Common squirrel monkey   | <i>Saimiri sciureus</i>          | SS0029 | M   | 5y  | 0.5         | 956000008250110 | NR              | Several cuts to body and ankle, unable to use foot. Blue sprayed and pen/step 0.3ml one injection. Euthanased by AG  | No PM report  | Conspecific injury   | Conspecific injury | NA  | NA   | No vet |
| 98  | 26/10/2015    | 26/10/2015 | Mammal<br>Primate    | Common squirrel monkey   | <i>Saimiri sciureus</i>          | SS0017 | F   | NR  | 0.35        | 956000001229499 | NR              | None - found dead in top house on beam, pregnant and blood around anus and back legs.  | Performed PM mainly on reproductive system - undeveloped foetus, was found along with uterus infection and pyometra.  | Septicemia or septic shock due to foetus death and infection.  | Infectious         | NA  | NA   | FRS    |
| 99  | 14/11/2015    | 14/11/2015 | Mammal<br>Primate    | Common squirrel monkey   | <i>Saimiri sciureus</i>          | NR     | F   | 2y  | 0.6         | 956000003011205 | NR              | Bleeding from her vulva, no sign of pregnant belly, quiet behaviour, limited interest in food. Metacam and lemoheprim/strep  | Undeveloped foetus was found along with uterus infection and pyometra   | Septicemia or septic shock due to foetus death and infection.  | Infectious         | NA  | NA   | FRS    |
| 100 | 14/11/2015    | 14/11/2015 | Mammal<br>Primate    | Cotton top tamarin       | <i>Saguinus oedipus</i>          | SJ0031 | M   | 9y  | 0.45        | 956000008002583 | NR              | "Pokoyo": quieter than usual and fluffed up, the day prior to death he was also wheezing. 0.1ml enrofloxacin (presumed 2.5%) day prior to death. Suspected pneumonic plague  | IZVG: hepatomegaly, splenomegaly, lymphadenopathy - suspicious yersinia but not confirmed at gross.   | Hepatitis  | Infectious         | Acute lymphadenitis, splenitis, colitis, mild acute pneumonia and minimal necrotising hepatitis. Yersiniosis considered unlikely. Toxoplasmosis immunohistochemistry undertaken - negative.                   | Bacteriology unrequiring - actual report not present but considered antibiotics to have affected it. | IZVG   |
| 101 | 19/11/2015    | 19/11/2015 | Mammal<br>Hoofstock  | Nyala                    | <i>Tragelaphus angasi</i>        | TGA003 | F   | 8m  | NR          | 900200000095826 | NR              | Young animal unable to cope with storm and being outside in cold wet weather.  | Externally animal was in good BCS, no signs of wounds or injuries, there was a total lack of gross PM pathology, all organs appeared normal and there was some food content in GIT, no diagnosis could be reached on the evidence of this PM  | Cause of death will be hypothermia due to exposure to extreme weather conditions.  | Husbandry          | NA  | NA   | FRS    |
| 102 | 19/11/2015    | 19/11/2015 | Mammal<br>Hoofstock  | Nyala                    | <i>Tragelaphus angasi</i>        | TG002  | M   | 5y  | NR          | 982000149657935 | NR              | "Sheldon": no hx   | No PM report - tissues sent for histology IZVG  | Open but presumed same as above animal   | Husbandry          | Lung, liver, heart - all normal   | Mild trichostongia infection and occasional candida - incidental finding.                            | No vet |
| 103 | 19/11/2015    | 19/11/2015 | Mammal<br>Primate    | Cotton top tamarin       | <i>Saguinus oedipus</i>          | SO0062 | NR  | NR  | 0.38        | 956000001520407 | NR              | Wheezing, given engemycin, metacam, baytril  | No PM report  | Open   | Open               | NA  | NA   | FRS    |
| 104 | 24/11/2015    | 24/11/2015 | Mammal<br>Primate    | Cotton top tamarin       | <i>Saguinus oedipus</i>          | SO0039 | NR  | 8m  | NR          | 956000004334898 | NR              | Wheezing, lying on her side with difficulty breathing. Semi comatose, euthanased onv vflare grounds  | Severe pneumonic lesions throughout the left lung with some free red/brown fluid in the left thoracic cavity. The right lung had a few small ecymotic haemorrhage areas. Grossly all abdominal organs were normal. This is the third tamarin to die from this enclosure group.  | Cause of death is pneumonia of infectious origin or from a common aerosol source of contamination - refer to lab results from other 2 deaths                       | Infectious         | NA  | NA   | RB     |
| 105 | 23/11/2015    | 23/11/2015 | Reptile tortoise     | Leopard tortoise         | <i>Stigmochelys pardalis</i>     | GP0010 | NR  | NR  | 0.1         | NR              | NR              | Not much interested in food, lethargic, smalles one smelly, not eating properly, unable to keep temperature.   | No PM report  | Husbandry  | Husbandry          | NA  | NA   | No vet |
| 106 | 22/11/2015    | 22/11/2015 | Avian<br>Pittacidae  | Blue fronted amazon      | <i>Amazona aestiva</i>           | AA0067 | M   | UNK | 0.275       | NR              | NR              | NR   | Unable to perform - body been eaten   | Open   | Open               | NA  | NA   | No vet |
| 107 | 25/11/2015    | 26/11/2015 | Mammal Other         | Capybara                 | <i>Hydrochaeris hydrochaeris</i> | No ID  | NR  | NR  | 4.6         | MC000004755926  | NR              | Found dead in house AM   | Animal was in good BCS, no external injuries were noted, grossly lesions confined to liver and lungs, stomach and intestines were empty. Caecum was full with normal faecal pellets in colon. No mesenteric LN enlargement. Spleen and kidneys appeared normal. Liver was slightly enlarged with areas of focal white spots suspicious of yersinia infection. Both lungs congested with mottled haemorrhagic areas, small (3-5mm, gritty hard lumps dotted throughout the lung tissue - these maybe abscesses or parasitic cysts.   | Suspect yersiniosis - histo and microbiology suggestive of Aeronomonas sp.   | Infectious         | Necrotising suppurative hepatitis with gram negative rod shaped bacteria, severe broncho-interstitial pneumonia with similar bacteria, consistent not consistent with Yersinia. Aeronomonas maybe significant | Aeronomonas but no report found  |        |
| 108 | 29/11/2015    | 30/11/2015 | Mammal Other         | Capybara                 | <i>Hydrochaeris hydrochaeris</i> | HH0021 | M   | NR  | 39.5        | MC000003040879  | NR              | Found dead in the AM, no history of symptoms of disease spotted before death.  | In good BCS, no external signs of injury, there were no signs of pathology in the abdomen, all organs normal in appearance, stomach normal ingesta, normal faeces in rectum. Dramatic pathology in the thorax. In each lung there was a large area of haemorrhage where clotted blood had filled in to the main bronchi and smaller airways, the unaffected lung areas were normal healthy pink colour. Trachea pink and normal. No other areas of haemorrhage noted int eh body.   | Lung haemorrhages of unknownv origin.  | Anatomical         | NA  | NA   | RB     |
| 109 | 01/12/2015    | 04/12/2015 | Mammal<br>marsupial  | Swamp wallaby            | <i>Wallabia bicolor</i>          | WB0030 | M   | 4y  | NR          | 956000001464372 | NR              | Found dead in the AM, no symptoms of illness had been spotted prior to death but had been noted to be the one most eating concentrates from the troughs in the house   | BCS 2 (bit thin), and no external injuries seen. There was little pathology of note to see in the carcase, thorax NAD, abdomen NAD, stomach contained a lot of part digested concentrate with very little fibre content, it may have been selectively feeding and not eating hay, this may have predisposed to an acidosis. There was a small area of inflamed SI with red/pink liquid content - submitted for clostridial toxins.  | Enteritis  | Infectious         | NA  | Faeces negative for clostridial toxins   | RB     |
| 110 | 04/12/2015    | 04/12/2015 | Mammal<br>Primate    | Saddleback tamarin       | <i>Saguinus fuscicollis</i>      | SF0004 | M   | 7y  | 0.3         | 968000005198143 | NR              | Long term scabbing on face, ears and genitals. Swelling of face, hair loss, lethargic, limited appetite, mites. Long term treatment didn't work, many tests done, problem continued. Animal became very weak.  | Generalised demodex and malassezia infection  | Demodex and malassezia   | Infectious         | NA  | NA   | IZVG   |
| 111 | 05/12/2015    | 06/12/2015 | Avian other          | Southern ground hornbill | <i>Bucorvus leadbeateri</i>      | BLB005 | F   | 8y  | 2.4         | Ripley          | Ilsecaus aviary | Lethargic, not eating, beaten by other hornbills   | No PM report  | Hypothermia, stayed outside in cold, wet weather, very thin, pecked by other hornbills   | Husbandry          | NA  | NA   | FRS    |
| 112 | 10/12/2015    | 10/12/2015 | Mammal<br>Primate    | Ring tailed lemur        | <i>Lemur catta</i>               | LC0009 | M   | 15y | 2.6         | 00-01CD-87AO    | NR              | "Gus": no previous signs of illness.   | IZVG: severe diffuse jaundice, disseminated intramuscular haemorrhages heart, diaphragm, abd and skeletal muscles, diffuse hepatopathy, multifocal pulmonary haemorrhages, splenomegaly   | Rodenticide poisoning  | Husbandry          | Severe acute haemorrhages, primarily the heart and skeletal muscle, and other organs, one of three cases all similar. Many dx; but rodenticide poisoning appears most likely.                                 | Negative yersinia and other bacteria of interest - found E.coli and alpha haemolytic streptococcus   | IZVG   |
| 113 | 19/12/2015    | 19/12/2015 | Mammal<br>marsupial  | Swamp wallaby            | <i>Wallabia bicolor</i>          | WB0031 | M   | 4y  | 15          | 956000008264971 | NR              | Abscess on inside of left leg for a long period of time, seemed more lethargic these past two days. Tribissen and engemycin LA, iodine spray and vetericyn. Died.  | No PM report - just case history  | Septic shock   | Infectious         | NA  | NA   | FRS    |
| 114 | 20/12/2015    | 20/12/2015 | Mammal<br>Primate    | Black and gold howler    | <i>Alouatta caraya</i>           | AC0154 | M   | 1y  | 1.6         | 956000003040906 | NR              | Cough like symptoms, sloppy faeces. Tx with tribissen and dewormed.  | IZVG: necrotising hepatitis, necrotising splenitis, ulcerative enteritis, acute lymphadenitis   | Suspected yersiniosis  | Infectious         | As per gross with intralesional bacterial colonies consistent with Yersiniosis. Could not grow but no bacterial pathogens isolated (CTDS)   |  |        |

| No. | Date of death | Date of PM | Taxa           | Species           | Species                 | ID     | Sex | Age | Weight (kg) | Microchip       | Location              | Hx  | Gross findings  | Diagnosis   | Category           | Histology   | Microbiology | Author |
|-----|---------------|------------|----------------|-------------------|-------------------------|--------|-----|-----|-------------|-----------------|-----------------------|---|---|---|--------------------|---|--------------|--------|
| 115 | 22/12/2015    | 24/12/2015 | Avian other    | Black vulture     | <i>Coragyps atratus</i> | CAT018 | M   | NR  | 1.5         | 95600001503612  | NR                    | Weak, wet, pecked by other vultures. The vulture had been struggling with wet cold weather and was getting weak. It was found on the floor very wet. The bird was missing feathers on the head and neck and had bleeding injuries on face, head and back of neck. Various wounds in body had been pecked by other vultures. | Haematoma around head, neck and face, this was clearly done by another vulture, the zone internally had ecchymoses and internal bleeding in the cervical vertebrae. There was damage to the skull and facial bones, damage to the wings and legs, bruises and wounds observed. No further investigations necessary due to no signs of other illnesses or infectious diseases. | Cause of death severe injuries to head and neck, caused by blunt trauma, in this case attacked by other vultures. Normal behaviour on these vultures is to kill the weak. | Conspecific injury | NA  | NA           | FRS    |
| 116 | 24/12/2015    | 24/12/2015 | Avian other    | Inca tern         | <i>Larusferia inca</i>  | CT1017 | NR  | NR  | 0.2         | NR              | NR                    | Flew into window  | No PM report  | Flew into window  | RTA / Trauma       | NA  | NA           | No vet |
| 117 | 26/12/2015    | 26/12/2015 | Avian anatidae | Southern screamer | <i>Chauna torquata</i>  | CT0002 | F   | NR  | 3.45        | 250229600025212 | NR                    | Externally animal was wet, although she had access inside. Was outside in the rain all night.   | No external indications of injury on the body. Total lack of gross postmortem pathology. All organs appeared normal.  | Waterflogged / exposure   | Husbandry          | NA  | NA           | FRS    |
| 118 | 27/12/2015    | 27/12/2015 | Mammal Primate | Ring tailed lemur | <i>Lemur catta</i>      | LC0119 | F   | 7y  | 2.45        | 956000000819106 | NR                    | She was quiet, had no appetite, she had separated herself from the group and spent most of her time curled up in the nest box. The day of death she had discharge from her vulva that was orange and had a very strong odour.   | IZVG PME: Moderate jaundice whole body, disseminated acute intramuscular haemorrhages heart, diaphragm and skeletal musculature, multiple haemorrhages.   | Rodenticide poisoning   | Husbandry          | moderate acute haemorrhages multiple tissues. Tissues for toxicology but not requested. | NA           | IZVG   |
| 119 | 28/12/2015    | 28/12/2015 | Mammal Primate | Ring tailed lemur | <i>Lemur catta</i>      | LC0118 | F   | 9y  | 2.5         | 956000000083999 | Bear house ring tails | No treatment, no symptoms, found dead with blood from nose.   | IZVG PME: Moderate jaundice whole body, disseminated acute intramuscular haemorrhages heart, diaphragm and skeletal musculature, multiple haemorrhages.   | Rodenticide poisoning   | Husbandry          | moderate acute haemorrhages multiple tissues. Tissues for toxicology but not requested. | NA           | IZVG   |
| 120 | 28/12/2015    | 03/01/2016 | Mammal Other   | Red squirrel      | <i>Sciurus vulgaris</i> | SV0008 | NR  | NR  | NR          | NR              | NR                    | Found dead partially eaten  | Unable to perform - body been eaten   | Open  | Open               | NA  | NA           | No vet |

| No. | Date of death | Date of PM | Taxa              | Species                    | Species                                | ID     | Sex | Age      | Weight (kg) | Microchip                | Location              | Hx   | Gross findings   | Diagnosis   | Category           | Histology | Microbiology                     | Author |
|-----|---------------|------------|-------------------|----------------------------|--|--------|-----|----------|-------------|--------------------------|-----------------------|--|--|---|--------------------|-----------|----------------------------------|--------|
| 1   | 30/01/2014    | 31/01/2014 | Mammal marsupial  | Red kangaroo               | <i>Macropus rufus</i>                  | MR0063 | F   | 7y       | 13.7        | 00-0667-2F2C             | NR                    | Broken limb, loss of appetite, LA oxytel, dex steroids, broken ankle. This kangaroo had a break trauma to the left ankle region in 2010, it recovered but with limited use and serious limp. The region of the original trauma collapsed and left the animal unable to walk and in pain. The animal was seen by RB but it died soon after. | In good BCS, carrying a joey in pouch of only a few months of age, the left leg was broken at the ankle joint, the animal was otherwise healthy. Food was found in the stomach, internal exam NAD.   | Cause of death stress and dehydration caused by the trauma to the leg and inability to cope with pain of the break  | RTA / Trauma       | NA        | NA                               | FRS    |
| 2   | 01/02/2014    | 01/02/2014 | Mammal Carnivore  | Giant otter                | <i>Pteronura brasiliensis</i>          | NA     | NR  | 1d       | NR          | NR                       | NR                    | Pups born the day before but did not feed and died due to no food, this was the 4th litter from this female all resulting in the same death within 2 days  | No PM report   | Mismothering  | Husbandry          | NA        | NA                               | FRS    |
| 3   | 01/02/2014    | 01/02/2014 | Mammal Carnivore  | Giant otter                | <i>Pteronura brasiliensis</i>          | NA     | NR  | 1d       | NR          | NR                       | NR                    | Pups born the day before but did not feed and died due to no food, this was the 4th litter from this female all resulting in the same death within 2 days  | No PM report   | Mismothering  | Husbandry          | NA        | NA                               | FRS    |
| 4   | 01/02/2014    | 01/02/2014 | Mammal Carnivore  | Giant otter                | <i>Pteronura brasiliensis</i>          | NA     | NR  | 1d       | NR          | NR                       | NR                    | Pups born the day before but did not feed and died due to no food, this was the 4th litter from this female all resulting in the same death within 2 days  | No PM report   | Mismothering  | Husbandry          | NA        | NA                               | FRS    |
| 5   | 01/02/2014    | 01/02/2014 | Mammal Other      | Black tailed prairie dog   | <i>Cynomys ludovicianus</i>            | NR     | F   | NR       | 0.54        | NR                       | NR                    | Wounds over body, the animal has been found in the enclosure dead, it was covered in lesions caused by attack from other animal and wet in rain  | In good condition towards fat, it was presented with suspected injuries that were consistent with an attack from another animal it was also very wet and muddy. Liver NAD, full gut, kidneys NAD, gall bladder NAD, lungs, trachea, heart NAD  | Serious injuries to the body caused by attack by other animals. Wet weather hastened death.   | Conspecific injury | NA        | NA                               | FRS    |
| 6   | 13/02/2014    | 13/02/2014 | Mammal Other      | Little egret               | <i>Egretta garzetta</i>                | NR     | NR  | NR       | 0.25        | MC000000607059           | NR                    | This animal was found in the enclosure dead, it was wet in the rain and partially eaten by rats  | No food was found in crop nor gizzard, kidneys NAD, gall bladder NAD, lungs, trachea, heart NAD  | Cause of death loss of condition in very wet winter, hypothermia.   | Husbandry          | NA        | NA                               | FRS    |
| 7   | 22/02/2014    | 22/02/2014 | Reptile snake     | Burmese python             | <i>Python bivittatus</i>               | PM0055 | M   | 12y      | 20.4        | NR                       | NR                    | Prolapse, rotten scles underneath, not eating for months, it died the day after it was reported ill.   | The snake as large and the front end was normal in every way, however the back end was rotten and necrotic and difficult to make any diagnosis. No food was found in the animal, the body was necrotic and was decomposing from the tail to the mid region approximately 2m into the animal. Lungs, trachea and heart NAD  | Cause of death the snake had not eaten according to the records for many months, the animal suffered collapse of the systems and due to possible weakness the rear end turned necrotic and caused the death.  | Husbandry          | NA        | NA                               | FRS    |
| 8   | 22/02/2014    | 23/02/2014 | Avian anatidae    | Hooded merganser           | <i>Lophodytes cucullatus</i>           | NR     | NR  | NR       | 0.335       | ZOOHD0079                | Front bird quarantine | Been out in the aviary for too long so was muddy and water logged. Didn't seem to dry out whilst inside quarantine.  | Bird was thin, very wet and covered in mud on presentation. Liver NAD. No food was found in crop, gizzard, kidneys NAD, gall bladder NAD, lungs, trachea, and heart NAD.   | The bird had lost condition and was waterlogged and covered in mud outside in the aviary due to the wet conditions all winter. It clearly had not been eating and died of the consequences, concern over the condition of the others in the group given to the keepers. | Husbandry          | NA        | NA                               | FRS    |
| 9   | 23/02/2014    | 23/02/2014 | Avian anatidae    | Hooded merganser           | <i>Lophodytes cucullatus</i>           | NR     | NR  | NR       | 0.323       | ZOOHD0053                | Front bird quarantine | Been out in the aviary where it had got too damp and muddy,  | Bird was thin, very wet and covered in mud on presentation. Liver NAD. No food was found in crop, gizzard, kidneys NAD, gall bladder NAD, lungs, trachea, and heart NAD.   | The bird had lost condition and was waterlogged and covered in mud outside in the aviary due to the wet conditions all winter. It clearly had not been eating and died of the consequences.   | Husbandry          | NA        | NA                               | FRS    |
| 10  | 28/02/2014    | 02/03/2014 | Avian Galliformes | Yellow golden pheasant     | <i>Chrysolophus pictus</i>             | NR     | M   | NR       | 0.648       | Blue GX                  | NR                    | Lots of feathers plucked out if him and looked unwell. Put in Madagascar area but subsequently died, probably attacked by something. The animal had been involved in fighting with other males and showed signs of trauma to the skull region.   | Bird was in good condition but suffering numerous injuries to the head and back caused by pecking from other birds. Liver NAD, no food was found in the crop and gizzard, kidneys NAD, gall bladder NAD, lungs, trachea, and heart NAD   | The bird had been involved in a very damaging fight with other males and died of the severe injuries and consequences.  | Conspecific injury | NA        | NA                               | FRS    |
| 11  | 02/03/2014    | 02/03/2014 | Avian anatidae    | Hooded merganser           | <i>Lophodytes cucullatus</i>           | NR     | NR  | Juvenile | 0.392       | ZOOHD0191                | Top quarantine        | Very waterlogged, hiding in corners.   | Bird was thin, very wet and covered in mud on presentation. Liver NAD. No food was found in crop, gizzard, kidneys NAD, gall bladder NAD, lungs, trachea, and heart NAD.   | The bird had lost condition and was waterlogged and covered in mud outside in the aviary due to the wet conditions all winter. It clearly had not been eating and died of the consequences.   | Husbandry          | NA        | NA                               | FRS    |
| 12  | 02/03/2014    | 02/03/2014 | Avian anatidae    | Hooded merganser           | <i>Lophodytes cucullatus</i>           | NR     | NR  | Juvenile | 0.392       | ZOOHD0091                | Top quarantine        | Thin and missing chest feathers,   | Bird was thin and missing chest feathers in presentation, liver NAD, no food in crop, gizzard, intestines, kidneys NAD, gall bladder NAD, lungs, trachea, heart NAD.   | The bird had lost condition and was waterlogged inside the housing, it clearly had not been eating and died of the consequences.  | Husbandry          | NA        | NA                               | FRS    |
| 13  | 04/03/2014    | 06/03/2014 | Mammal Primate    | Hamadryas baboon           | <i>Papio hamadryas</i>                 | PH0042 | M   | 5y       | 14          | NR                       | NR                    | Population control - euthanased with immobilon   | No PM report   | Euthanased population control   | Management         | NA        | NA                               | No vet |
| 14  | 04/03/2014    | 06/03/2014 | Mammal Primate    | Hamadryas baboon           | <i>Papio hamadryas</i>                 | PH0047 | M   | 4y       | 16          | NR                       | NR                    | Population control - euthanased with immobilon   | No PM report   | Euthanased population control   | Management         | NA        | NA                               | No vet |
| 15  | 04/03/2014    | 06/03/2014 | Mammal Primate    | Hamadryas baboon           | <i>Papio hamadryas</i>                 | PH0055 | M   | 3y       | 15          | NR                       | NR                    | Population control - euthanased with immobilon   | No PM report   | Euthanased population control   | Management         | NA        | NA                               | No vet |
| 16  | 04/03/2014    | 06/03/2014 | Mammal Primate    | Hamadryas baboon           | <i>Papio hamadryas</i>                 | PH0058 | M   | 2y       | 14.5        | NR                       | NR                    | Population control - euthanased with immobilon   | No PM report   | Euthanased population control   | Management         | NA        | NA                               | No vet |
| 17  | 06/03/2014    | 06/03/2014 | Avian other       | East African crowned crane | <i>Balearica regulorum gibbericeps</i> | 5561   | M   | NR       | NR          | MC00-064DA433            | NR                    | Swelling from infection on left foot, very warm, bird lame, dramatic weight loss over weeks of illness despite eating well. Enrofloxacin and meloxicam   | Foot was very swollen, warm and lid as lame. Enlarged liver, greenish colour, food content was found in gizzard and intestines, kidneys NAD, gall bladder NAD, lungs, trachea and heart NAD. Left tarsal and metatarsophalangeal joint showed a caseous necrosis with serofibrinous exudate and a lot of fibrous reaction around it, swabs were taken from the exudate | Cause of death was possible septicaemia from either an infectious synovitis or staphylococcal arthritis (bumblefoot)  | Infectious         | NA        | Mixed faecal flora - faecal swab | FRS    |
| 18  | 07/03/2014    |            | Avian anatidae    | Tufted duck                |  | NR     | M   | NR       | NR          |                          | NR                    | New one from big shipment, released from house onto lake, very wet as no waterproofing to feathers, died   | Bird was in excellent condition but totally soaked through, liver NAD, food content was found in crop, gizzard and intestines, kidneys NAD, gall bladder NAD, lungs, trachea, heart NAD  | Cause of death was hypothermia from waterlogging  | Husbandry          | NA        | NA                               | FRS    |
| 19  | 08/03/2014    |            | Avian other       | Cattle egret               |  | NR     | NR  | NR       | 0.4         | ZOO PRAHA 099 (left leg) | NR                    | Put inside with dropped wings, reluctant to eat. Wet in the rain.  | Bird as in very bad condition, very thin and dehydrated. Liver NAD, no food was found in crop and gizzard. Kidneys NAD, gall bladder NAD. Duodenum has some content and it had a torsion and necrotic section where the food couldn't get through. This content had a rotten smell and the rest of the intestines were empty all the way to the cloaca.                | Probably gastric torsion, volvulus and consequent starvation and dehydration  | Anatomical         | NA        | NA                               | FRS    |
| 20  | 11/03/2014    | 13/03/2014 | Avian other       | Greater rhea               |  | NR     | UNK | Young    | NR          | 981100002797091          | NR                    | Legs splayed on the morning of death. Was put out on the field for the first time and broke his leg (complete fracture), had to be put down as couldn't be fixed.  | Bird was in good condition, leg was broken below the ankle joint, liver NAD, food in crop, gizzard and intestines, kidneys NAD, gall bladder NAD.  | Leg break, loss of blood and stress (JC - euthanased in notes)  | RTA / Trauma       | NA        | NA                               | FRS    |

| No. | Date of death | Date of PM | Taxa              | Species                | Species                             | ID     | Sex | Age      | Weight (kg) | Microchip            | Location       | Hx   | Gross findings  | Diagnosis  | Category     | Histology   | Microbiology  | Author    |
|-----|---------------|------------|-------------------|------------------------|-------------------------------------|--------|-----|----------|-------------|----------------------|----------------|--|---|--|--------------|---|---|-----------|
| 21  | 18/03/2014    | 18/03/2014 | Avian anatidae    | Tufted duck            |                                     | NR     | M   | Very old | 0.3         | Right leg green band | NR             | Found in the lemur corridor, unknown cause of death.   | Bird was in bad condition, very thin, head eaten away with little left, rest of body untouched. Liver NAD, food content was found in crop, gizzard and intestines. Kidneys NAD, gall bladder NAD.   | Probably from weasal or stoat attack   | Predation    | NA  | NA  | FRS       |
| 22  | 18/03/2014    | 18/03/2014 | Avian analidae    | Ne-ne                  | <i>Brania sandvicensis</i>          | NR     | F   | NR       | 1.75        | Red ZV               | NR             | Internal reproductive organs hanging down and not herself, standing still with eyes half shut, got progressively worse for the next hour until time of death.  | The goose was in reasonable condition, it showed severe prolapse of the cloacal region. Food was found in crop and gizzard, internal exam showed no abnormalities at all. Liver NAD, kidneys NAD, gall bladder NAD, egg stuck in prolapsed area, lungs NAD, trachea NAD, heart NAD  | Caused severe prolapse of cloacal region, loss of blood, caused by egg binding internally  | Anatomical   | NA  | NA  | FRS       |
| 23  | 19/03/2014    | 19/03/14   | Avian anatidae    | Ne-ne                  | <i>Brania sandvicensis</i>          | NR     | M   | 10y      | 1.7         | Red RA               | NR             | None, seemed fine the day before and was eating fine   | Food was found in crop and gizzard, internal exam NAD   | Probably caused by old age and constant wet challenging weather  | Husbandry    | NA  | NA  | FRS       |
| 24  | 23/03/2014    | 24/03/2014 | Reptile tortoise  | Spur thighed tortoise  | <i>Testudo graeca</i>               | NR     | F   | NR       | 2.05        | 956000008264102      | NR             | Very lethargic   | No PM report  | Open   | Open         | NA  | NA  | No vet    |
| 25  | 27/03/2014    | 27/03/2014 | Mammal marsupial  | Brush tailed bettong   | <i>Bettongia penicillata</i>        | BP0080 | F   | 4y       | 0.75        | 956000008250626      | NR             | Infection in the pouch and ears, pen strep administered.   | No PM report  | Open   | Open         | NA  | NA  | No vet    |
| 26  | 28/03/2014    | 28/03/2014 | Avian Galliformes | Reeves pheasant        |                                     | NR     | F   | NR       | 0.8         | Green GA             | Bush area      | Flew into mongoose enclosure and was killed and eaten  | No PM report  | Predation  | Predation    | NA  | NA  | No vet    |
| 27  | 30/03/2014    | 07/06/2014 | Mammal marsupial  | Brush tailed bettong   | <i>Bettongia penicillata</i>        | BP0112 | F   | 2m       | 0.8         | 956000003120582      | NR             | NR   | Good BCS, some bloody discharge from nose, stomach and intestines had some food content, caecum and large intestines with regular content, liver had yellow borders, fat deposits around kidneys and mesentery, fat around heart, fluid in thoracic cavity, white spots in lungs indicating infection   | Possible pneumonia, hydrothorax, pleuritis due to a respiratory infection  | Infectious   | NA  | NA  | FRS       |
| 28  | 01/04/2014    | 02/04/2014 | Mammal Chiroptera | Rodrigues Fruit Bat    | <i>Pteropus rodricensis</i>         | PR0121 | M   | NR       | 0.4         | 968000004221555      | NR             | "Zanda" this bat has no signs of injury, illness or damage - a normally healthy animal.  | No PM report  | Open   | Open         | NA  | Staphylococcus aureus mouth swab                        | RB        |
| 29  | 03/04/2014    | 03/04/2014 | Mammal Hoofstock  | Giraffe                | <i>Giraffa camelopardalis</i>       | GC0019 | F   | 44d      | 80 (est)    | 956000003196607      | NR             | Dislocated left hip 09/03/14, euthanased. Managed conservatively to see if would form a pain free fibrous false joint. No improvement over the past three weeks. The joint was obviously riding upwards on the rare occasions she attempted to put weight on that leg, she was suckling OK and moving around but would stand for long periods in one position, resting the left leg and looking uncomfortable. I decided to euthanase on humane grounds. | No PM report  | Euthanased - dislocated hip  | RTA / Trauma | NA  | NA  | RB        |
| 30  | 04/04/2014    | 05/04/2014 | Avian anatidae    | Ferruginous duck       |                                     | AA0005 | M   | NR       | 0.281       | NR                   | NR             | No clinical signs noted, found dead in the morning so died overnight, was fine the previous day with no signs of illness.  | No PM report  | Open   | Open         | NA  | NA  | No vet    |
| 31  | 08/04/2014    | 08/04/2014 | Mammal Primate    | Common squirrel monkey | <i>Saimiri sciureus</i>             | SS0043 | M   | 6m       | 0.3         | 956000001539692      | NR             | Very lethargic, eyes white heavy, very skinny and moving around via parents back as had little energy, breathign was rapid. Fluids, CCF, pen strep   | Body was in reasonable condition with no external signs of injury or disease, there was some red stained fluid free in the abdomen, kidneys, liver, spleen and bladder all grossly normal, stomach was empty, enlarged mesenteric LN, intestinal contents were semisolid and red stained in the jejunum and ileum. Swabs from liver surface and jejunal contents sent for lab analysis. No haemorrhages anywhere in the carcass | Septicaemic condition  | Infectious   | NA  | Profuse growth of mixed anaerobes                       | RB        |
| 32  | 09/04/2014    | 10/04/2014 | Avian Psittacine  | Scarlet macaw          | <i>Ara macao</i>                    | NR     | M   | NR       | 1           | 981100002928232      | NR             | Loss of appetite, thin   | Faeces in lower GIT were of normal consistency, very little content in upper GIT. Liver enlarged with many small white spots.   | Cause of death liver failure, likely yersiniosis   | Infectious   | CTDS* Hepatitis, necrotising to granulomatous, marked with myriad intralosomal bacteria.                                      | Liver profuse proteus growth                            | RB        |
| 33  | 16/04/2014    | 17/04/2014 | Reptile tortoise  | Leopard tortoise       |                                     | NR     | F   | NR       | 1.45        | 956000001541117      | NR             | No known symptoms  | No PM report  | Open   | Open         | NA  | NA  | No vet    |
| 34  | 17/04/2014    | 17/04/2014 | Reptile tortoise  | Spur thighed tortoise  | <i>Testudo graeca</i>               | NR     | F   | NR       | 0.8         | 956000001540008      | NR             | No known symptoms  | No PM report  | Open   | Open         | NA  | NA  | No vet    |
| 35  | 21/04/2014    | 21/04/2014 | Mammal Primate    | Ring tailed lemur      | <i>Lemur catta</i>                  | LC0077 | M   | 23d      | 0.15        | NA                   | NR             | Drowned in pond  | In reasonable BCS, no signs of traumatic injury, evidence in both lungs of pneumonia, patches of inflamed abnormal tissue in both lungs, no food in stomach nor SI and normal faeces in rectum  | Pneumonia  | Infectious   | NA  | NA  | RB        |
| 36  | 22/04/2014    | 22/04/2014 | Mammal Primate    | Common squirrel monkey | <i>Saimiri sciureus</i>             | SS0035 | F   | 2y       | 0.35        | 956000008247983      | NR             | Fairly thin, very dehydrated, was unable to move much from weakness. Large swelling under chin so was holding head back at an angle - likely to have been unable to drink or eat for some time. Given fluids and warm dry enclosure.   | No gross abnormalities visible in the chest or abdominal organs, no food in stomach or upper SI but there was normal faeces in the lower SI and rectum. No evidence of external trauma to cause the throat swelling. There was oedematous fluid of green colour as part of the swelling which involved salivary and lymph glands, sections sent for histo.  | Actual cause of death unknown but suspect it must be linked to this mass in the throat - pasteurellosis from bite wound suspected. | Infectious   | Fibrinosuppurative cellulitis/lymphadenitis/sialadenitis with coccobacillary bacteria, likely pasteurellosis from bite wound. | Proteus, nonhaemolytic E.coli and Pasteurella multocida | RB / IZVG |
| 37  | 22/04/2014    | 22/04/2014 | Avian other       | Caribbean flamingo     | <i>Phoenicopterus ruber</i>         | PCR027 | NR  | NR       | NR          | 958000001378300      | Flamingo house | Found dead in the flamingo house, looked very thin, no signs of injury.  | Thin BCS, very obvious pathology restricted to the kidneys, grossly swollen and mottled with many small white micro abscesses (JC - actually gout)  | Kidney failure   | Anatomical   | IZVG: amyloidosis, renal gout   | NA  | RB / IZVG |
| 38  | 23/04/2014    | 09/05/2014 | Mammal Primate    | Gentle lemur           | <i>Haplemur griseus alaotrensis</i> | NR     | M   | 13y      | 0.9         | NR                   | NR             | "Feno": significant weight loss, irregular appetite, weakness and instability. Penstrep x8d, prednisolone x3days. Euthanased.  | Pathology limited to kidneys, left was 1.2x0.75cm, fibrosed and pale, right was 2.2x1.4cm lobular cystic and pale   | Chronic kidney failure   | Anatomical   | NA  | Proteus, nonhaem E.coli - chin                          | RB        |
| 39  | 23/04/2014    | 23/04/2014 | Avian anatidae    | Ne-ne                  | <i>Brania sandvicensis</i>          | NR     | NR  | 6y       | 1.95        | 968000003764525      | NR             | No signs of injury, found in bush area at 12pm   | Gross egg peritonitis with 2 intact egg yolks and approx 25ml liquefied egg yolk present in the abdomen, all other organs normal. The bird was fat with normal faeces.  | Shock from ruptured oviduct and egg peritonitis  | Anatomical   | NA  | NA  | RB        |
| 40  | 23/04/2014    | 28/04/2014 | Avian anatidae    | Fulvus whistling duck  |                                     | NR     | NR  | NR       | 0.55        | Silver band 2840     | NR             | Found eaten in Madagascar area   | No PM report  | Open   | Open         | NA  | NA  | No vet    |
| 41  | 23/04/2014    | 09/05/2014 | Mammal Primate    | Common squirrel monkey | <i>Saimiri sciureus</i>             | 4503   | M   | NR       | NR          | NR                   | NR             | Found decomposed in pond, thought to have drowned by natural causes?   | Its body looked like it had drowned and it had been dead for over 10 days. Not possible to make more examinations   | Open   | Open         | NA  | NA  | FRS       |

| No. | Date of death | Date of PM | Taxa                  | Species                      | Species                            | ID     | Sex | Age | Weight (kg) | Microchip              | Location       | Hx  | Gross findings   | Diagnosis   | Category           | Histology                       | Microbiology   | Author |
|-----|---------------|------------|-----------------------|------------------------------|------------------------------------|--------|-----|-----|-------------|------------------------|----------------|---|--|---|--------------------|---------------------------------|--|--------|
| 42  | 24/04/2014    | 24/04/2014 | Avian Sphenisciformes | Humboldt penguin             | <i>Spheniscus humboldti</i>        | SH0011 | M   | 6y  | 2.8         | 96800000315286         | NR             | "Willand": attacked by another penguin, damaged eye and took in a lot of water. Bad breathing, eyelid sealed over, losing weight and getting weaker. Also regurgitating food. Bird had been suffering for two weeks from a respiratory infection, it had received antibiotic therapy for most of that period with no apparent response or improvement in symptoms | Thin BCS, gross pathology confined to the lungs. Both lungs were completely severely affected by yellow necrotic pneumonia and pleurisy, no normal lung tissue visible anywhere.   | Pneumonia (?aspergillosis, bacterial)   | Infectious         | NA                              | E.coli, clostridia, candida - all sparse growth                                  | FRS    |
| 43  | 26/04/2014    | 26/04/2014 | Mammal Primate        | Ring tailed lemur            | <i>Lemur catta</i>                 | LC0147 | M   | 3y  | 2.9         | 956000001233519        | NR             | "Rex" Mauled by tiger, puncture wounds to abdomen and back right leg, intestines now externally exposed   | The lemur got into the tiger enclosure and was mauled by tiger. It was found with puncture wounds to abdomen and back right leg, all abdominal organs were externally exposed. No need for further investigation   | Mauled by tiger   | Conspecific injury | NA                              | NA   | FRS    |
| 44  | 06/05/2014    | 10/05/2014 | Avian anatidae        | North American Wood duck     | <i>Aix sponsa</i>                  | NR     | NR  | 3y  | NR          | Red UF                 | NR             | Eaten by giant otters   | No PM report   | Eaten by giant otters   | Conspecific injury | NA                              | NA   | No vet |
| 45  | 11/05/2014    | 11/05/2014 | Avian Psittacine      | Sulphur crested cockatoo     | <i>Cacatua galerita</i>            | CGA001 | M   | 32  | 0.362       | NR                     | NR             | Very swollen crop, not himself, excessive amounts of water dribbling out of his beak, loss of appetite and balance before death, then being sick and falling off perch, died whilst being sick.   | Body in thin condition, trachea, lungs and heart in normal condition, the bird had a full oesophagus, the crop was also full of food and water, there was also a large amount of food in the gizzard. Gizzard was dissected and strange black seed undigested was found blocking the passage into the small intestine, small intestines and rest of digestive system was empty.  | Blocked gizzard (JC - what about PDS??)   | Anatomical         | NA                              | NA   | FRS    |
| 46  | 13/05/2014    | 16/05/2014 | Avian other           | Turkey vulture               | <i>Cathartes aura</i>              | CAV008 | M   | 2y  | 1.9         | NR                     | NR             | Injury to left wing suspected attack from condor, returned to main aviary and suspected second attack, wing no improvement and muscle damage to legs, not using them, weight loss, isolated for a week for treatment, euthanased, no need for further investigation   | No PM report   | Attacked by condor  | Conspecific injury | NA                              | NA   | FRS    |
| 47  | 14/05/2014    |            | Mammal marsupial      | Western grey kangaroo        | <i>Macropus fuliginosus</i>        | MF0074 | M   | 10y | NR          | 967000000620721        | NR             | Foot infection for several months, treated with antibiotics on several occasions but the infection did not cease, the foot infection was getting worse despite the use of topical iodine, it became an infectious granuloma with fibrosis. Animal started losing weight in the last two months, had difficulty moving around and in obvious pain.                 | When dissecting the granuloma into P3 the bone was found broken into splinters either due to infection or an old injury  | Necrosuppurative pododermatitis   | Infectious         | Necrosuppurative pododermatitis | NA   | FRS    |
| 48  | 16/05/2014    | 16/05/2014 | Mammal marsupial      | Patagonian crested duck      | <i>Lophonetta specularioides</i>   | CD0336 | M   | NR  | 1           | Blue CH                | NR             | None prior to death, eating well 15/05, not thin at all, no obvious wounds or injuries  | Coleomic viscera NAD, broken left pubis bone was fractured in two sections, no food in GIT   | Possible lack of feeding, pain and immobility due to fractured pelvis   | RTA/ Trauma        | NA                              | NA   | FRS    |
| 49  | 17/05/2014    | 17/05/2014 | Mammal Primate        | White bellied ruffed lemur   | <i>Varecia variegata subcineta</i> | NA     | NR  | 10d | NR          | NR - dam VV5007 Maelle | NR             | Had back leg bitten off on 15/05/14 and had middle finger on front right hand bitten off, no meds administered, found dead in outside catchment. DOB 27/04/14   | No PM report   | Bitten by own motehr or other adult lemurs  | Conspecific injury | NA                              | NA   | FRS    |
| 50  | 20/05/2014    | 20/05/2014 | Mammal Hoofstock      | Reindeer                     | <i>Rangifer tarandus</i>           | NA     | F   | 4d  | 4.15        | NA                     | NR             | Not feeding from mother, very weak and not holding head, unsteady on legs, bottle fed and fluids administered   | Calf became weaker and died, no need for further investigation   | Mismothering  | Husbandry          | NA                              | NA   | FRS    |
| 51  | 23/05/2014    | 23/05/2014 | Avian Psittacine      | Military macaw               |                                    | NR     | NR  | NR  | NR          | 9560000002590280       | NR             | The bird was ill for over a week, it was very lethargic, with its wings and head down, fluffed feathers, depressed and weak. It was loosing weight fast, although it was eating fine, other symptoms were diarrhoea and biliverdinuria. Bird was isolated in vet room and x5d of enrofloxacin, then tribissen x 2 d, kept on food and water                       | Animal was very skinny and dehydrated, loose stool was seen on feathers around the cloaca, there was food content on crop, proventriculus, and gizzard, gizzard content was very green. Liver was a greenish colour with necrotic and inflammation signs, lungs, heart and kidneys were normal.  | Psittacosis   | Infectious         | NA                              | Faeces: profuse nonhaemolytic E.coli, C.psititaci qPCR positive (moderate level) | FRS    |
| 52  | 26/05/2014    | 26/05/2014 | Mammal marsupial      | Brush tailed beltong         | <i>Beltongia penicillata</i>       | NR     | F   | NR  | 0.15        | 956000003038192        | NR             | Possible blocked airways, appeared to be filling.   | No PM report   | Open  | Open               | NA                              | NA   | No vet |
| 53  | 27/05/2014    | 28/05/2014 | Mammal Hoofstock      | Reindeer                     | <i>Rangifer tarandus</i>           | RT0002 | F   | 7y  | 75          | NR                     | NR             | Found collapsed in the field (26/05), very shallow breathign and non-responsive, calcium, finidine and tribissen, nursing a 3wk old calf  | No outwards sings of traumatic injury or disease, significant findngns at PM were confined to a section of jejunum, red purple in colour for approx 60cm in mid SI, contents were red/brown/bloody in appearance, rectal contents runny and green in colour, approx 300ml of red/purple fluid free in teh abdomen, all organs in abdomen and chest were grossly normal. Acute toxemia, possibly clostridial in origin is suspected | Enteritis   | Infectious         | NA                              | Negative clostridial toxin screen  | RB     |
| 54  | 28/05/2014    | 28/05/2014 | Mammal marsupial      | Parma wallaby                | <i>Macropus parma</i>              | MP0061 | F   | 8y  | 3.2         | 968000003751153        | NR             | No history  | Looked in good condition and was carrying an immature young in her pouch which was also dead, the right top mammary gland was swollen and looked inflamed. No food on stomach or SI, however caecum and colon were full, liver NAD, kidneys and bladder NAD. 4mm cyst was found in left uterus, heart NAD, lungs had signs of inflammation and infection, with white pus marks   | Possible septicaemia due to mastitis or pneumonia   | Infectious         | NA                              | NA   | FRS    |
| 55  | 31/05/2014    | 31/05/2014 | Mammal Chiroptera     | Rodrigues Fruit Bat          | <i>Pteropus rodricensis</i>        | PR0205 | M   | NR  | 0.283       | 956000001500661        | Tropical house | No symptoms seen  | No PM report   | Open  | Open               | NA                              | NA   | No vet |
| 56  | 01/06/2014    | 01/06/2014 | Mammal Hoofstock      | Reindeer                     | <i>Rangifer tarandus</i>           | NR     | F   | 4w  | 9.1         | 956000003038244        | NR             | Motehr died, reluctant to take milk from keepers  | No PM report   | Loss of dam, not feeding  | Husbandry          | NA                              | NA   | No vet |
| 57  | 16/06/2014    | 16/06/2014 | Mammal Chiroptera     | Rodrigues Fruit Bat          | <i>Pteropus rodricensis</i>        | NR     | F   | NR  | 0.231       | 956000001518725        | NR             | Found dead in bat house AM, has been chewed by rats   | No PM report   | Open  | Open               | NA                              | NA   | No vet |
| 58  | 19/06/2014    | 19/06/2014 | Mammal Primate        | Black and white ruffed lemur | <i>Varecia variegata variegata</i> | VVV002 | F   | 17y | 2.8         | MC00-01E6-4D05         | NR             | Very weak, poor condition of fur, weight loss, reduced appetite, hypersensitive reaction to being touched or moved, unable to move limbs without difficulty/strain, not grooming herself so kept laying in own faeces / urine/ 3days of enrofloxacin, meloxicam, CCF and SC fluids  | Very thin, no food content in stomach nor intestines, no food intake for 24-48 hours, liver normal, heart NAD, pneumonia in both lungs   | Pneumonia   | Infectious         | NA                              | NA   | FRS    |
| 59  | 23/06/2014    | 23/06/2014 | Reptile tortoise      | Red footed tortoise          |                                    | NR     | M   | NR  | 3.05        | 956000001516643        | NR             | "Tyson" no hx   | No PM report   | Open  | Open               | NA                              | NA   | No vet |
| 60  | 28/06/2014    | 28/06/2014 | Avian other           | Sun bittern                  | <i>Eurypygus helias</i>            | NR     | F   | 8y  | 0.113       | Metal 3887             | NR             | Bird was found dead and wet inside aviary   | No signs of any organ damage, GIT empty.   | Cause of death lack of feeding and possible starvation, this type of bird belongs to tropical weather she was wet and not being eating properly for a long time | Husbandry          | NA                              | NA   | FRS    |

| No. | Date of death | Date of PM | Taxa              | Species              | Species                      | ID     | Sex | Age   | Weight (kg) | Microchip       | Location   | Hx  | Gross findings  | Diagnosis   | Category           | Histology                               | Microbiology                     | Author |
|-----|---------------|------------|-------------------|----------------------|------------------------------|--------|-----|-------|-------------|-----------------|------------|---|---|---|--------------------|---|----------------------------------|--------|
| 61  | 28/06/2014    | 28/06/2014 | Avian other       | Night heron          | <i>Nycticorax nycticorax</i> | NR     | M   | Adult | 0.329       | Blue BD         | NR         | Beak badly broken, also very thin. Was kept in vel room for 2 days. In very poor condition, very thin and not able to eat.  | No signs of organ damage, GIT totally empty   | Lack of feeding and starvation, due to broken beak  | RTA / Trauma       | NA                                      | NA                               | FRS    |
| 62  | 16/07/2014    | 17/07/2014 | Avian Galliformes | Blue eared pheasant  | <i>Crossoptilon aurilum</i>  | CA1001 | M   | 2y    | NR          | Green GF        | NR         | Very thin, unable to balance, not eating, would run into walls and round in circles, eyes often wouldn't be properly open. Flubenvet, trybacin  | Animal was in very poor condition, very thin, liver NAD, no food in crop, some food in gizzard, kidneys NAD, gall bladder NAD, lungs, trachea, heart NAD, over 15 abscesses were found attached to muscle over cervical vertebrae, different sizes, very defined pus sacs, pus sent for culture   | Septicaemia caused by several abscesses - E.coli  | Infectious         | NA                                      | Pure growth of haemolytic E.coli | FRS    |
| 63  | 18/07/2014    |            | Mammal Hoofstock  | Reindeer             | <i>Rangifer tarandus</i>     | NR     | F   | 2y    | 45          | NR              | NR         | Loss of lower back right leg - no further notes   | No PM report  | Loss of right hind  | RTA / Trauma       | NA                                      | NA                               | No vet |
| 64  | 22/07/2014    | 22/07/2014 | Mammal Chiroptera | Rodriguez Fruit Bat  | <i>Pteropus rodricensis</i>  | PR0150 | M   | NR    | 0.237       | 956000001198815 | NR         | No hx   | No PM report  | Open  | Open               | NA                                      | NA                               | No vet |
| 65  | 22/07/2014    | 24/07/2014 | Mammal Other      | Red squirrel         | <i>Sciurus vulgaris</i>      | NR     | M   | NR    | 0.5         | MC0006133E5D1   | NR         | Unseen for three days, bees nest in enclosure, found dead on floor of enclosure partly eaten by rats  | No PM report  | Open  | Open               | NA                                      | NA                               | No vet |
| 66  | 25/07/2014    | 25/07/2014 | Mammal Primate    | Tufted capuchin      | <i>Sapajus apella</i>        | CAA007 | F   | 13y   | 1.7         | 250229600049024 | NR         | Monkey was found lethargic and depressed, she died 4 hours later.   | Externally there was a haematoma or ecchymosis, consistent with a blunt trauma most likely from a fall from a height onto a branch or similar, this ecchymosis was observed on the right side of the abdomen and lower chest. Due to the abdominal and lower chest blunt trauma damage to the abdominal organs were involved, there was severe blood loss, splenic and liver injuries, the liver was contused, developing a haemorrhage, that caused exsanguination. Thoracic viscera NAD | Exsanguination caused by blunt trauma to abdominal organs esp the liver. No further investigations were done or were necessary, due to no signs of other illnesses or infectious diseases, specifically diseases noted on the balai directive. The balai check sheet followed and no further investigation were deemed necessary. | RTA / Trauma       | NA                                      | NA                               | FRS    |
| 67  | 07/08/2014    |            | Mammal marsupial  | Swamp wallaby        | <i>Wallabia bicolor</i>      | WB0053 | M   | NR    | NR          | 968000004258645 | NR         | Swelling to RHS face, weight loss, antitrope and tribrisen daily. Old animal with chronic molar infection for years, treated on several occasions but infection persisted, started losing weight and being lethargic a few months ago although it was eating fine, swelling to the right hand side of the face with a bad odour and obvious pain were observed. | Very obvious pathology was restricted to the maxilla bone, necrotic tissue around teeth and gum, fibrotic granuloma and teeth decay were observed, all internal organs were normal condition.   | Death due to septicaemia due to chronic infection (JC necrobacillosis)  | Infectious         | NA                                      | NA                               | FRS    |
| 68  | 08/08/2014    |            | Avian other       | Black vulture        | <i>Coragyps atratus</i>      | NR     | NR  | NR    | 1           | 956000001515560 | Quarantine | No hx   | No PM report  | Open  | Open               | NA                                      | NA                               | No vet |
| 69  | 09/08/2014    | 09/08/2014 | Avian other       | Greater rhea         |                              | NR     | M   | NR    | 30          | 956000003106934 | NR         | Stressed from release into bush area the previous day   | No PM report  | Open  | Open               | NA                                      | NA                               | No vet |
| 70  | 09/08/2014    | 09/08/2014 | Avian other       | Greater rhea         |                              | NR     | M   | NR    | 30          | 956000003039091 | NR         | Fell into the mineshaft and had got stuck, got very cold and couldn't move legs   | No PM report  | Trauma  | RTA / Trauma       | NA                                      | NA                               | No vet |
| 71  | 10/08/2014    | 10/08/2014 | Mammal Carnivore  | Fennec fox           | <i>Vulpes zerda</i>          | VZ0008 | F   | 14m   | 1.2         | NR              | NR         | Head stuck in mesh fence  | No PM report  | Head stuck in mesh fence  | RTA / Trauma       | NA                                      | NA                               | No vet |
| 72  | 11/08/2014    | 11/08/2014 | Avian other       | Black vulture        | <i>Coragyps atratus</i>      | NR     | NR  | NR    | 1.1         | 956000001500350 | Quarantine | Loss of use of left leg for a couple of days, lethargic, not feeding by itself. Suspected nerve damage, (? Died/euthanased) - collected by defra  | No PM report  | Open  | Open               | NA                                      | HIA negative                     | No vet |
| 73  | 14/08/2014    | 15/08/2014 | Avian Galliformes | Monal pheasant       |                              | NR     | F   | NR    | NR          | NR              | NR         | Found dead with head missing on the new site  | No PM report  | Decapitation - presumed predation   | Predation          | NA                                      | NA                               | No vet |
| 74  | 21/08/2014    | 21/08/2014 | Mammal marsupial  | Brush tailed bellong | <i>Bettongia penicillata</i> | BP0113 | F   | 3m    | 0.5         | MC000002965126  | NR         | Found dead in enclosure, no prior symptoms noted  | PM unremarkable, no gross findings anywhere. No food content in the stomach or most of the intestine, indicating not eaten 24-48hrs   | Starvation  | Husbandry          | NA                                      | NA                               | RB     |
| 75  | 22/08/2014    |            | Avian Psittacine  | Military macaw       |                              | NR     | NR  | NR    | 0.95        | MC0001CDCA39    | NR         | Laboured breathing. Bird had been under treatment for a week with a swollen eye, had improved in condition and bird had been feeding OK, on 21/08 signs of resp difficulty and a swollen neck was noted, died overnight   | Swelling was just air in crop and gullet, 3 bright green/yellow pea-sized seeds in distal end of oesophagus and more same colour in gizzard but ground up, normal faeces in colon/cloaca, semi yellow solid content in SI, resp system normal, all abdominal organs grossly normal. Samples sent off  |   | Open               | Liver normal                            | Faeces - E.coli                  | RB     |
| 76  | 05/09/2014    | 05/09/2014 | Avian anatidae    | Ferruginous duck     |                              | NR     | NR  | NR    | 0.279       | Red CR          | NR         | Very thin and walking around in unusual pace by tapir hours, brought inside and was eating well then decreased and activity decreased, sudden death   | Thin in condition, pallid muscles, no food in stomach or intestines, cloaca was dilated and a blocked vent was found, dry faecal material was blocking the passage from cloaca to vent, viscera normal  | Open  | Open               | NA                                      | Faeces NAD, some candida         | FRS    |
| 77  | 09/09/2014    |            | Avian other       | Black vulture        | <i>Coragyps atratus</i>      | NR     | NR  | NR    | 1.5         | BMK HX          | NR         | No symptoms of illness prior to death, just out of quarantine for a week. It was very young and found on the floor very depressed and wet. The bird was missing feathers on the head and neck and had bleeding injuries on face, head and back of neck. Isolated next door but was not eating, found dead the next morning.                                     | Externally a haematoma could be observed around the head, neck and face, this was clearly done by another vulture, the zone internally had ecchymosis and internal bleeding in cervical vertebrae, there was damage to skull and face bones. No further investigations were done or necessary due to no other signs of illness or infectious diseases.  | Severe injuries to head and neck, caused by blunt trauma, in this case attacked by another vulture  | Conspecific injury | NA                                      | NA                               | FRS    |
| 81  | 12/09/2014    | 12/09/2014 | Mammal marsupial  | Brush tailed bellong | <i>Bettongia penicillata</i> | NR     | F   | NR    | NR          | 956000008247637 | NR         | Sneezing, seizures, possible toxoplasmosis nervous system symptoms, diarrhoea last day, tribrisen one week in vel room. Found dead lying in diarrhoea   | Externally animal looked skinny and faeces covering tail, back legs. Internally there was no food content in GIT which means animal did not eat for 24-48hrs. There was mucus diarrhoea in colon, liver and spleen looked enlarged but not significantly, lungs and heart in normal condition.  | Based on symptoms possible toxoplasmosis  | Open               | Brain and lung - no diagnosis made IZVG | NA                               | FRS    |

| No. | Date of death | Date of PM | Taxa                 | Species                      | Species                            | ID     | Sex | Age | Weight (kg) | Microchip       | Location | Hx  | Gross findings  | Diagnosis   | Category           | Histology  | Microbiology  | Author |
|-----|---------------|------------|----------------------|------------------------------|------------------------------------|--------|-----|-----|-------------|-----------------|----------|---|---|---|--------------------|--|---|--------|
| 78  | 16/09/2014    |            | Mammal<br>Hoofstock  | Lowland tapir                | <i>Tapirus terrestris</i>          | SL0050 | F   | NR  | NR          | "Libby"         | NR       | Found dead lying in the ditch of an adjacent enclosure to her own, during the night something, unknown had occurred to make libby break through the wire of her enclosure and fall into the ditch where she was found dead. | There was only one area of injury apparent on her body, the top incisor teeth had been broken out of the gum, there was some haemorrhage from this area and also some blood coming down both nostrils, internally all abdominal organs were grossly normal in appearance with normal faeces in the rectum and plenty of food in the stomach, the heart appeared grossly normal, the lungs were heavy, full of blood and red/purple in appearance with no normal light pink inflated areas of lung tissue, this pulmonary congestion was undoubtedly the cause of death, this may have been caused by repeated electric shocks from the electric fence affecting the heart pacemaker resulting in arrhythmia and subsequent signs of right heart failure with blood pooling in the lungs | Escape and electrocution  | Husbandry          | NA   | NA  | RB     |
| 79  | 17/09/2014    |            | Mammal<br>Primate    | Tufted capuchin              | <i>Sapajus apella</i>              | CAA003 | F   | 19y | 1.7         | NR              | NR       | Vomiting, lethargic, mucous from the nose for 2 days, nothing seen prior to that, 2 days of baytril injections and SC fluids.   | IZVG: extensive acute SC, IO and submeningeal haemorrhage head, focal thrombosis aorta, ulcerative gastritis.   | Acute cranial trauma - likely fall following aortic thrombus                    | Anatomical         | fibrinosuppurative pneumonia, fibrinous thrombosis aorta, hepatitis, gastritis | NA  | IZVG   |
| 80  | 17/09/2014    |            | Reptile<br>Tortoise  | Spur thighed tortoise        | <i>Testudo graeca</i>              | NR     | F   | NR  | 0.103       | "Lealea"        | NR       | Lethargic and reluctant to eat  | No PM report  | Open  | Open               | NA   | NA  | No vet |
| 82  | 18/09/2014    | 18/09/2014 | Avian<br>Galliformes | Golden pheasant              |                                    | NR     | M   | NR  | NR          | Blue TV         | NR       | Was a bit thin the day before it passed away but had been kept inside, possible drowning as was found in the lake   | The bird as in vetsroom for a few days due to some wound and injuries to the head and neck, clearly done by another bird. He recovered well and was let outside, it was found dead in pond few days later. Bird was thin condition, missing feathers on head and neck, severe injuries done by another bird in cervical area. From the inside severe haematoma were observed all around the neck with exsanguination, blood clots and vvertebrae damage. No need for further investigation.   | Traumatic injuries / shock after attack by another bird                         | Conspecific injury | NA   | NA  | FRS    |
| 83  | 19/09/2014    | 19/09/2014 | Avian<br>Psittacine  | Blue and yellow macaw        | <i>Ara ararauna</i>                | AA0052 | F   | 13y | 0.85        | NR              | NR       | "Lorena": found dead under a bamboo plant in the main aviary, beak was wedged between stems   | Bird was in good BCS, diarrhoea evidence at base of the tail, no other external abnormalities, enlarged liver, friable with focal necrosis, enlarged spleen, enteritis of anterior SI and caecal cores, haemorrhagic GIT, food content on gizzard, heart, lungs, NAD, air sacs clear.   | Suspect due to bacterial infection causing enteritis (salmonella symptoms)      | Infectious         | NA   | Salmonella sp isolated (no evidence that was typed), Chlamydia negative   | FRS    |
| 84  | 21/09/2014    | 21/09/2014 | Avian<br>other       | Night heron                  | <i>Nycticorax nycticorax</i>       | NR     | M   | NR  | NR          | 528210002625033 | NR       | Found dead in aviary and had been partially eaten by vultures.  | No SC fat layer, no falciform fat and no omental fat therefore would actually classify as emaciated, liver gall bladder distended with dark green sludge, kidneys Nad, GIT very small amount of dark green fibrous digesta and a small number of grains in proventriculus, limited coloured liquid digesta in SI, some soft light brown faecal pellets in distal LI, heart and lungs NAD  | Emaciation  | Husbandry          | NA   | CTDS faecal microbiology no bacterial pathogens isolated  | FRS    |
| 85  | 22/09/2014    | 27/09/2014 | Avian<br>Psittacine  | African grey parrot          | <i>Psittacus erithacus</i>         | PEE008 | F   | 13y | NR          | NR              | NR       | Salmonella  | Bird in good BCS, well muscled, evenly feathered, wing, tail and ventral plumage are unremarkable, oesophagus and crop with no food content, wrinkled grey mucosa with mild deposit of mucus, some green seeds found in gizzard. No food content in small or large intestines, dark pink mucosa, empty cloac. Liver friable, enlarged with visible haemorrhage, resp system blood clots in lumen of trachea, lungs both with haemorrhage, heart normal, enlarged spleen, kidneys normal, quiescent ovary  | Severe haemorrhage in lungs, bronchi and trachea, enteritis, liver haemorrhage. | Infectious         | NA   | Salmonella sp isolated (no evidence that was typed), Chlamydia negative   | FRS    |
| 86  | 22/09/2014    | 06/10/2014 | Mammal<br>Primate    | Black and white ruffed lemur | <i>Varecia variegata variegata</i> | VVV076 | NR  | 5m  | 1.5         | 95600002952516  | NR       | Bleeding from back end, fluids and enrofloxacin   | No PM report  | Open  | Open               | NA   | NA  | No vet |
| 87  | 24/09/2014    | 24/09/2014 | Avian<br>Psittacine  | Blue and yellow macaw        | <i>Ara ararauna</i>                | AA0061 | F   | 8y  | 1.024       | 956000008229889 | NR       | "Chico" found dead on floor of aviary under walkway, appeared to have fallen from perch, congealed blood in throat  | IZVG: acute severe haemorrhage lungs, trachea, bronchi, airsacs, acute haemorrhage and rupture liver, chronic feather loss and regrowth dors body and head,   | Salmonellosis   | Infectious         | Fibrinous hepatitis, haemorrhagic interstitial pneumonia, air sacculitis       | Salmonella sp (group B) - S. typhimurium sib genus 1 serogroup Bm ohage type 41b - frequently rodent associated | IVZG   |
| 88  | 24/09/2014    | 03/10/2014 | Mammal<br>Primate    | Hamadryas baboon             | <i>Papio hamadryas</i>             | PH0046 | M   | NR  | NR          | NR              | NR       | Population control - euthanased   | No PM report  | Euthanased population control   | Management         | NA   | NA  | No vet |
| 89  | 24/09/2014    | 03/10/2014 | Mammal<br>Primate    | Hamadryas baboon             | <i>Papio hamadryas</i>             | PH0058 | M   | NR  | NR          | NR              | NR       | Population control - euthanased n JC please note already killed 04/03/14  | No PM report  | Euthanased population control   | Management         | NA   | NA  | No vet |
| 90  | 24/09/2014    | 03/10/2014 | Mammal<br>Primate    | Hamadryas baboon             | <i>Papio hamadryas</i>             | PH0060 | M   | NR  | NR          | NR              | NR       | Population control - euthanased   | No PM report  | Euthanased population control   | Management         | NA   | NA  | No vet |
| 91  | 24/09/2014    | 03/10/2014 | Mammal<br>Primate    | Hamadryas baboon             | <i>Papio hamadryas</i>             | PH0061 | M   | NR  | NR          | NR              | NR       | Population control - euthanased   | No PM report  | Euthanased population control   | Management         | NA   | NA  | No vet |
| 92  | 24/09/2014    | 03/10/2014 | Mammal<br>Primate    | Hamadryas baboon             | <i>Papio hamadryas</i>             | PH0062 | M   | NR  | NR          | NR              | NR       | Population control - euthanased   | No PM report  | Euthanased population control   | Management         | NA   | NA  | No vet |
| 93  | 27/09/2014    | 27/09/2014 | Avian<br>Psittacine  | Scarlet macaw                | <i>Ara macao</i>                   | NR     | F   | NR  | 0.948       | "Apache"        | NR       | Lethargic, fluffed up, quiet. Found dead in cage in vet centre, no visible wounds, etc, secretion like phlegm from beak.  | Bird was in good BCS, diarrhoea evidence on base of tail, mucus secretions from beak, no signs of wounds or injuries, enlarged friable liver, focal necrosis, small liver abscesses, enlarged white pancreas, enlarged spleen, enteritis of anterior SI and caecal cores, food content in crop, white seeds and peanuts, heart pericardial haemorrhages, lungs, trachea and air sacs clear.   | Salmonellosis   | Infectious         | NA   | Salmonella sp isolated (no evidence that was typed), Chlamydia negative   | FRS    |
| 94  | 27/09/2014    | 27/09/2014 | Avian<br>Psittacine  | Blue and yellow macaw        | <i>Ara ararauna</i>                | AA0062 | M   | 10y | 0.975       | 956000008250249 | NR       | Lethargic, fluffed up, eyes a bit sunken, quiet, some semi transparent liquid in throat, yellow/green bile colour, no visible wounds nor injuries. Found dead.  | Enlarged liver, friable with focal necrosis, enlarged spleen, enteritis of anterior SI and caecal cores, yellowish greenish mucus content in crop, oesophagus, proventriculus and intestines, food content on gizzard, white seeds, expanded gall bladder Heart NAD, lungs diffuse acute haemorrhage in both lungs, air sac clear, trachea greenish mucus secretions.   | Salmonellosis   | Infectious         | NA   | Salmonella sp isolated (no evidence that was typed), Chlamydia negative   | FRS    |



| No. | Date of death | Date of PM | Taxa              | Species                  | Species                          | ID      | Sex | Age | Weight (kg) | Microchip                           | Location | Hx  | Gross findings  | Diagnosis  | Category           | Histology | Microbiology  | Author |
|-----|---------------|------------|-------------------|--------------------------|----------------------------------|---------|-----|-----|-------------|-------------------------------------|----------|---|---|--|--------------------|-----------|---|--------|
| 95  | 28/09/2014    | 29/09/2014 | Avian Galliformes | White eared pheasant     | <i>Crossoptilon crossoptilon</i> | CCR001  | F   | NR  | NR          | 273AP1214                           | Bush     | Bird found dead in bush area with no previous signs of illness  | Animal was in good body and muscle condition, feathers missing on head, face and neck, no signs of wounds or injuries. Thick layer of SC fat, wing, tail and ventral plumage unremarkable, thick fat deposits around all internal abdominal organs, fatty liver, food in GT, heart enlarged and covered in fat                                  | Acute heart failure due to inappropriate long term diet, especially high cholesterol intake  | Husbandry          | NA        | No salmonella, no chlamydia, no bacterial pathogens isolated            | FRS    |
| 96  | 03/10/2014    | 03/10/2014 | Avian anatidae    | North American Wood duck | <i>Aix sponsa</i>                | NR      | F   | NR  | NR          | Red DJ                              | NR       | Bird was found dead with no previous condition or signs of illness  | Bird was in very good body condition, feathers in good condition, no external signs of wounds or injuries, thick layer of SC fat. Liver enlarged and fatty, very large gall bladder with big amount of green content, thick layer of fat tissue around all abdominal organs, no food found in GIT, lungs, trachea, NAD, heart surrounded by fat | Hepatic lipidosis  | Husbandry          | NA        | NA  | FRS    |
| 97  | 05/10/2014    | 08/10/2014 | Mammal marsupial  | Brush tailed bettong     | <i>Bettongia penicillata</i>     | BP0092  | F   | 3y  | 1           | 95600008250964                      | NR       | Swollen, infected nose, breathing very weedy and sneezing a lot, condition of skin and fur very poor and dirty, had sores on bottom of feet. Tribissen sid 14 days then endramissen 7d, bathe in skin scrub, feed juicy fruits and keep indoors in warm dry area. | Poor BCS, bloody purulent discharge from nostrils, infected purulent wound on base of tail and feet, signs of diarrhoea around anus, stomach had some food, profuse enteritis observed along GIT, liver and gall bladder NAD, fluid was inside thoracic cavity, mucus inside trachea and nasal cavity, lungs NAD.                               | Cause of death was septicaemia caused by major wounds and inability to respond to treatment  | Infectious         | NA        | NA  | FRS    |
| 98  | 08/10/2014    | 08/10/2014 | Avian anatidae    | Black swan               |                                  | NR      | F   | NR  | NR          | Yellow band left leg                | NR       | Very thin and unsteady on feet, brought inside in AM, tuber fed emerald, keep warm and tube feeding.  | Animal very thin, no signs of wounds nor injury, poor muscle condition, enteritis observed in GIT, mucus content, proventriculus contained emerald from day before, grass seeds in gizzard, some haemorrhage spots on lungs, appeared to be infected showing mucus inside alveoli.  | Suspected salmonellosis due to park history  | Infectious         | NA        | Salmonella sp isolated (no evidence that was typed), Chlamydia negative | FRS    |
| 99  | 20/10/2014    | 21/10/2013 | Avian Galliformes | Golden pheasant          | <i>Chrysolophus pictus</i>       | NR      | M   | 1y  | NR          | NR                                  | NR       | Attacked by other birds, had previously been attacked by other birds, stress, lack of food, visible wounds, massive bleeding to death.  | No PM report  | Conspecific injury   | Conspecific injury | NA        | NA  | No vet |
| 100 | 24/10/2014    | 24/10/2014 | Avian Psittacine  | Blue and yellow macaw    | <i>Ara ararauna</i>              | AA0055  | M   | NR  | NR          | NB08NL14 06PGC1                     | NR       | Difficulty in breathing, very raspy, decreased appetite, sporonox and enrofloxacin  | Good BCS, no other external abnormalities, liver NAD, some food content in GIT, kidneys NAD, gall bladder NAD, heart some haemorrhage on right atrium, lungs had multifocal pus infection - pneumonia, air sacculitis observed, trachea white mucus in trachea and nostrils   | Respiratory tract infection, acute airsacculitis and pneumonia   | Infectious         | NA        | No salmonella, no chlamydia, no bacterial pathogens isolated            | FRS    |
| 101 | 30/10/2014    | 31/10/2014 | Avian anatidae    | Common pochard           |                                  | NR      | F   | NR  | NR          | 7458 metal band                     | NR       | Species ID not confirmed, most of body had been eaten   | No PM report - body eaten   | Open   | Open               | NA        | NA  | No vet |
| 102 | 05/11/2014    | 07/11/2014 | Avian anatidae    | Comb duck                | <i>Sarkidiornis melanotos</i>    | SM0001  | M   | 1y  | NR          | THD 0037                            | NR       | Trauma  | No PM report  | Trauma   | RTA / Trauma       | NA        | NA  | No vet |
| 103 | 06/11/2014    | 06/11/2014 | Avian Galliformes | Lady Amers's pheasant    | <i>Chrysolophus amherstiae</i>   | NR      | M   | NR  | 0.48        | Red Ek                              | NR       | Not eating, underweight   | No PM report  | Open   | Open               | NA        | NA  | No vet |
| 104 | 10/11/2014    | 10/11/2014 | Avian other       | Inca tern                | <i>Larosterna inca</i>           | NR      | F   | 1y  | NR          | Yellow band left 36E1173 blue right | NR       | Unable to perform PM body eaten   | No PM report - body eaten   | Open   | Open               | NA        | NA  | No vet |
| 105 | 11/11/2014    | 11/11/2014 | Avian other       | Inca tern                | <i>Larosterna inca</i>           | LT1010  | M   | 1y  | NR          | Purple on left, blue 32E1173        | NR       | Poor flight, lack of alertness the previous night.  | No PM report - body eaten   | Open   | Open               | NA        | Bacteriology - no pathogens isolated                                    | No vet |
| 106 | 15/11/2014    | 15/11/2014 | Avian Galliformes | Golden pheasant          | <i>Chrysolophus pictus</i>       | NR      | M   | NR  | NR          | Red UH                              | NR       | Found dead in the mine shaft, cause of death possibly drowned   | No PM report  | Open   | Open               | NA        | NA  | No vet |
| 107 | 19/11/2014    | 19/11/2014 | Avian other       | Inca tern                | <i>Larosterna inca</i>           | LT1009  | F   | 1y  | 0.128       | Green left, Red right 6E11736       | NR       | Body eaten by rats unable to perform PM   | No PM report - body eaten   | Open   | Open               | NA        | NA  | No vet |
| 109 | 09/12/2014    | 09/12/2014 | Avian other       | Black vulture            | <i>Coragyps atratus</i>          | CAT019  | M   | NR  | NR          | 956000001538212                     | NR       | No history  | One of two on same PM report - birds were in bad condition, very thin and very wet and muddy, liver NAD, no food at all was found in crop, gizzard or GIT, kidneys NAD, gall bladder NAD, lungs and trachea liquid content in respiratory tract, heart NAD.   | Cause of death hypothermia   | Husbandry          | NA        | No salmonella, no bacterial pathogens isolated                          | FRS    |
| 108 | 11/12/2014    | 11/12/2014 | Avian other       | Black vulture            | <i>Coragyps atratus</i>          | CAT014  | F   | NR  | NR          | 956000001199446                     | NR       | Found dead by side of aviary mesh, back down in a puddle, wound on right side of face, not sure if post or antemortem see PM  | Two of two on same PM report - birds were in bad condition, very thin and very wet and muddy, liver NAD, no food at all was found in crop, gizzard or GIT, kidneys NAD, gall bladder NAD, lungs and trachea liquid content in respiratory tract, heart NAD.   | Cause of death hypothermia   | Husbandry          | NA        | No salmonella, no bacterial pathogens isolated                          | FRS    |
| 110 | 20/12/2014    | 22/12/2014 | Avian anatidae    | Tufted duck              | <i>Aythya fuligula</i>           | AFL0002 | NR  | 1y  | 0.15        | 250228500022442                     | NR       | Shaking, thin and not moving or eating much, 0.1ml Tribissen for two days, tx tx in vet room for five days, egemycin, recovered well and then outside, found dead next day. It was wet in the rain.   | Bird was in bad condition, very thin and very wet and muddy, liver NAD, some food was found in crop and gizzard, kidneys NAD, gall bladder NAD, lung, trachea nd heart NAD  | Dramatic change of temperature from being indoors to a very cold, wet winter - hypothermia   | Husbandry          | NA        | NA  | FRS    |
| 111 | 28/12/2014    | 29/12/2014 | Avian Galliformes | Golden pheasant          | <i>Chrysolophus pictus</i>       | CPC001  | M   | 1y  | 0.72        | Green AB                            | NR       | Puncture wounds to head, attacked by another bird, possibly a stork   | Very poor and thin condition with no muscle, injuries and wounds on head and neck, big puncture wound beside ear canal, visible haematomas on neck area with signs of internal local bleeding on cervical vertebrae   | Cause of death due to severe injuries and bleeding on head and cervical caused by fighting with other birds, no need for further investigation | Conspecific injury | NA        | NA  | FRS    |

| No. | Date of death | Date of PM | Taxa              | Species                  | Species                      | ID          | Sex | Age        | Weight (kg) | Microchip       | Location | Hx   | Gross findings   | Diagnosis   | Category   | Histology   | Microbiology | Author |
|-----|---------------|------------|-------------------|--------------------------|------------------------------|-------------|-----|------------|-------------|-----------------|----------|--|--|---|------------|---|--------------|--------|
| 1   | 02/01/2013    | 03/01/2013 | Mammal Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodricensis</i>  | PR0055      | F   | NR         | NR          | MC00-0664-3767  | NR       | No hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 2   | 05/01/2013    | 05/01/2013 | Mammal marsupial  | Brush tailed bettong     | <i>Bettongia penicillata</i> | NR          | M   | NR         | 0.35        | "Urwin"         | NR       | Found collapsed under mother, slight raspy breathing, couldn't hold body up  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 3   | 15/01/2013    | 15/01/2013 | Mammal Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodricensis</i>  | PR0046      | F   | NR         | 0.25        | MC00-0130-2929  | NR       | No Hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 4   | 17/01/2013    | 17/01/2013 | Avian other       | Scarlet Ibis             | <i>E. ruber</i>              | ER0003      | F   | NR         | 0.6         | 250229600045235 | NR       | Unknown cause of death   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 5   | 20/01/2013    | 20/01/2013 | Mammal Primate    | Mandrill                 | <i>Mandrillus sphinx</i>     | MS0003      | F   | 13y        | 40          | "Sara"          | NR       | Slow, careful movements, moving very carefully and stiff, unknown cause of death. Dominant female in group, cold weather, particularly affected her day before was found dead.   | No signs of external injuries, fat bordering obese, significant fat deposits in the abdomen were yellow in colour, liver was a mottled bronze colour with round edges as if a little swollen, no other significant lesions or abnormalities noted in the abdomen or thorax, liver and kidney samples have been sent to the laboratory for histo. | Possibility of liver damage caused by excess iron or copper intake being a factor on this animal's death. | Open       | IZVG: mild chronic interstitial nephritis, mild vacuolar hepatopathy, no cause of death. Advised sample more tissues in future. | NA           | RB     |
| 6   | 21/01/2013    |            | Mammal Carnivore  | Asian small clawed otter | <i>Aonyx cinereus</i>        | AC0020      | F   | 12y        | 1.85        | 00-0064-2349    | NR       | Lethargy, weight loss, disorientation, loss of appetite, hair loss - reason for death unknown, body to NMS   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 7   | 23/01/2013    | 24/01/2013 | Mammal Chiroptera | Rodriguez fruit bat      | <i>Pteropus rodricensis</i>  | PR0042      | M   | NR         | 0.1         | 00-0606-1242    | NR       | No hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 8   | 26/01/2013    | 26/01/2013 | Mammal Primate    | Mandrill                 | <i>Mandrillus sphinx</i>     | MS0005      | F   | 6y         | 27          | NR              | NR       | Sat outside alone in the snow 26/01, underneath walkway, very reluctant to move, seemed to be afraid of going near the house, had to be chased in. Whilst running seemed stiff around hind legs and wobbly, stumbled whilst running. Once inside sat by the slide alone, took a long time to come over to food, found dead at 8am next day, small wound to back of right ankle.  | No signs of injury and body was in good condition, there was food in the stomach and normal faeces in the rectum, no visible pathological abnormalities seen in this animal, all organs appeared normal and no abnormal fluids in body cavities. No similarities to mother that died week before.  | Open  | Open       | NA  | NA           | RB     |
| 9   | 02/02/2013    | 02/02/2013 | Mammal marsupial  | Parma wallaby            | <i>Macropus parma</i>        | MP0032      | F   | 11y        | 3.3         | NR              | NR       | Found on roof field panting, given 0.2ml tribrisen.  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 10  | 02/02/2013    | 03/02/2013 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>  | MF0132      | F   | 9y         | 23          | 956000001412418 | NR       | Stress   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 11  | 09/02/2013    | 10/02/2013 | Mammal Primate    | Hamadryas baboon         | <i>Papio hamadryas</i>       | NR          | M   | still born | 0.6         | NA              | NR       | Stillborn  | No PM report   | Still born  | Open       | NA  | NA           | No vet |
| 12  | 14/02/2013    | 15/02/2013 | Mammal marsupial  | Brush tailed bettong     | <i>Bettongia penicillata</i> | BP0085      | M   | 2y         | 0.7         | 956000001230854 | NR       | No hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 13  | 14/02/2013    | 14/02/2013 | Reptile tortoise  | African spurred tortoise | <i>Centrochelys sulcata</i>  | GS0004      | F   | NR         | NR          | "Bono"          | NR       | No hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 14  | 23/02/2013    | 23/02/2013 | Mammal Primate    | Ring tailed lemur        | <i>Lemur catta</i>           | LC0005      | M   | 13y        | 2.05        | 00-01CB-C5F5    | NR       | "Louie": right side of face swollen, skin around bottom right gum appeared infected and some flesh died dropping off to leave visible hole in side of mouth, right eye was bulging and appeared to lose focus. Was very reluctant to move or eat as too weak to do so, penstrep for 6d and syringe full of CCF. possible infection in mouth which may have spread to brain, possible broken jaw, could be original cause of infection? | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 15  | 27/02/2013    | 27/02/2013 | Reptile tortoise  | African spurred tortoise | <i>Centrochelys sulcata</i>  | GS0005      | F   | NR         | 13.5        | 956000000385271 | NR       | No hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 16  | 29/02/13      | 01/03/2013 | Reptile tortoise  | Spur thighed tortoise    | <i>Testudo graeca</i>        | TG0047      | NR  | NR         | 0.9         | 956000008247407 | NR       | Suspected to have spent an extended period upside down under the heat lamp, therefore died of overheating  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 17  | 02/03/2013    | 04/03/2013 | Avian other       | Caribbean flamingo       | <i>Phoenicopterus ruber</i>  | PCR005      | NR  | NR         | 1.9         | 958000001391643 | NR       | Fell over on 28/02 and dislocated right ankle and broke skin around ankle, ankle put back in palce and stitched up.  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 18  | 11/03/2013    | 11/03/2013 | Avian other       | Eurasian spoonbill       | <i>Platalea leucorodia</i>   | PL0009      | F   | 10y        | 0.95        | 956000001226256 | NR       | Unknown, partially eaten by vultures   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 19  | 20/03/2013    | 20/03/2013 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>  | MR0137      | F   | 2y         | 16          | 956000002426170 | NR       | Unknown, possible stress due to excessive mating   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 20  | 22/03/2013    | 22/03/2013 | Mammal Primate    | White fronted lemur      | <i>Eulemur albitrois</i>     | EAA006      | M   | 14y        | 1.4         | 250229600002354 | NR       | Infected back of foot, possible internal infection. Pen step, vitamins.  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 21  | 22/03/2013    | 23/03/2013 | Mammal Other      | Domestic rabbit          | <i>Oryctolagus cuniculus</i> | Not on ZIMS | M   | NR         | 2.55        | NR              | NR       | Head falls to left when trying to hop around, infected abscess on right side of mouth, very hard, bulging of both eyes, eyes became unresponsive to touch, shile film grew over eyes, completely stopped eating, rarely drinking, very unresponsive. Given 0.5ml penstrep for 8 days, changed to 0.1ml tribrisen for 1d, died from possible mouth infection that spread to brain.  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 22  | 24/03/2013    | 24/03/2013 | Mammal Primate    | Ring tailed lemur        | <i>Lemur catta</i>           | LL0077      | M   | 1d         | <0.05       | NA              | NR       | Possible still born twin, found squashed under tortoise  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 23  | 24/03/2013    | 24/03/2013 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>  | MF0133      | M   | 1y5m       | 15.6        | 956000002410528 | NR       | Unknown  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 24  | 24/03/2013    | 24/03/2013 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>  | MF0135      | M   | 2y7m       | 26.5        | 956000002684804 | NR       | Unknown  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 25  | 24/03/2013    | 24/03/2013 | Mammal marsupial  | Parma wallaby            | <i>Macropus parma</i>        | MP0082      | M   | 5y         | 3.85        | 956000001225089 | NR       | Swelling of face, discharge from right eye, left side of face has visible bone on nose where dead skin wiped away, wasn't seen eating nor drinking, given engemycin for 13d, unknown possible infection spread to brain.   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 26  | 25/03/2013    | 25/03/2013 | Avian other       | Little egret             | <i>Egretta garzetta</i>      | EG0012      | NR  | 5y         | NR          | NR              | NR       | Unknown - remains only, only found two wings and a leg, rest of body not found   | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 27  | 25/03/2013    | 25/03/2013 | Mammal marsupial  | Western grey kangaroo    | <i>Macropus fuliginosus</i>  | MF0138      | F   | 2y4m       | 15.1        | 956000002669775 | NR       | "Matilda" lethargic, stopped eating, possible stress due to over mating, this had been treated periodically in past month for a respiratory condition, that had apparently responded well to antibiotics and not been treated for a week before she deteriorated rapidly and died.   | The chest cavity was severely abscessed with free thick green/yellow pus, the lungs were severely pneumonic with multiple abscesses and were in several places adhered to the chest wall by fibrinous pleuritic tags, cause of death was severe pneumonia and pleurisy.  | Pneumonia   | Infectious | NA  | NA           | RB     |
| 28  | 25/03/2013    | 26/03/2013 | Mammal marsupial  | Brush tailed bettong     | <i>Bettongia penicillata</i> | NR          | M   | 6m         | 0.1         | NA              | NR       | No hx  | No PM report   | Open  | Open       | NA  | NA           | No vet |
| 29  | 25/03/2013    | 25/03/2013 | Mammal Primate    | Ring tailed lemur        | <i>Lemur catta</i>           | LC0077      | M   | 1d         | <0.05       | NA              | NR       | Wasn't clinging to mother properly or suckling enough, mother dropped it several times previously before being found squashed under a tortoise   | No PM report   | Open  | Open       | NA  | NA           | No vet |

| No. | Date of death | Date of PM | Taxa                  | Species                  | Species                            | ID     | Sex | Age        | Weight (kg) | Microchip       | Location | Hx   | Gross findings  | Diagnosis                         | Category              | Histology                         | Microbiology | Author |
|-----|---------------|------------|-----------------------|--------------------------|------------------------------------|--------|-----|------------|-------------|-----------------|----------|--|---|-----------------------------------|-----------------------|-----------------------------------|--------------|--------|
| 30  | 30/03/2013    | 01/04/2013 | Avian Psittacine      | Southern mealy amazon    | <i>Amazona farinosa</i>            | AF0010 | NR  | 10y        | NR          | "Ziggy"         | NR       | No CS prior to sudden death, not exhibiting signs of illness or acting out of character, flying around eating, no weight loss.   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 31  | 30/03/2013    | 31/03/2013 | Mammal Primate        | Colton top tamarin       | <i>Saguinus oedipus</i>            | NA     | M   | 1d         | NR          | NA              | NR       | Face chewed by mother  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 32  | 30/03/2013    | 31/03/2013 | Mammal Primate        | Colton top tamarin       | <i>Saguinus oedipus</i>            | NA     | M   | 1d         | NR          | NA              | NR       | Half eaten by mother   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 33  | 02/04/2013    | 02/04/2013 | Mammal Primate        | Common squirrel monkey   | <i>Saimiri sciureus</i>            | SS0030 | M   | 13y        | 0.8         | 956000001198431 | NR       | No hx  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 34  | 03/04/2013    | 04/04/2013 | Mammal marsupial      | Western grey kangaroo    | <i>Macropus fuliginosus</i>        | MF0139 | F   | 8y         | 17          | 926000001379858 | NR       | Very lethargic, not seen eating/drinking   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 35  | 04/04/2013    | 04/04/2013 | Avian other           | Sacred ibis              | <i>Threskiornis aethiopicus</i>    | TA0066 | NR  | NR         | 0.95        | 956000001223946 | NR       | Unknown  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 36  | 07/04/2013    | 09/04/2013 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                 | LC0057 | M   | Still born | <0.05       | NA              | NR       | Still born   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 37  | 08/04/2013    | 09/04/2016 | Mammal Primate        | Black lemur              | <i>Eulemur macaco</i>              | LM0016 | M   | 6d         | 0.1         | NA              | NR       | Repetitively dropped by mother   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 38  | 10/04/2013    | 10/04/2013 | Mammal Primate        | Mandrill                 | <i>Mandrillus sphinx</i>           | MS0008 | F   | 5y         | NR          | NR              | NR       | Numerous severe injuries over her body from fighting other mandrills, euthanased   | No PM report  | Conspecific injuries (euthanased) | Conspecific injury    | NA                                | NA           | RB     |
| 39  | 14/04/2013    | 14/04/2013 | Avian other           | Caribbean flamingo       | <i>Phoenicopterus ruber</i>        | PCR026 | NR  | NR         | 2.25        | 958000001367366 | NR       | Just dropped dead in mineshaft   | Bird was in good BCS, no signs of wounds or external injury, abdominal contents appeared normal. The chest cavity was full of free blood from a massive haemorrhage, it is not clear if this was due to a traumatic impact to chest wall or a rupture of a major blood vessel wall due to an aneurism or naturally occurring weakness | Major blood loss - cause unknown  | Anatomical            | NA                                | NA           | RB     |
| 40  | 15/04/2013    | 15/04/2013 | Avian Galliformes     | Cheer pheasant           | <i>Catreus wallichii</i>           | CW0007 | F   | NR         | 0.65        | NR              | NR       | Unknown, been attacked by something, been plucked and skinned on back and neck   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 41  | 18/04/2013    | 18/04/2013 | Mammal Hoofstock      | Reindeer                 | <i>Rangifer tarandus</i>           | NR     | NR  | Still born | NR          | NR              | NR       | Still born   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 42  | 26/04/2013    | 26/04/2013 | Mammal Primate        | Siamang                  | <i>Symphalangus syndactylus</i>    | SS0051 | M   | 22y        | NR          | 956000001509353 | NR       | "Kane": feeding well yesterday morning, last night did not come in to feed, a bit shaky but then seen feed on banana. Soften top this morning but not seen to feed. Checked at 1300hrs, lying down and not moving, singing from lying down position, persuaded to move on a pole, RB was called, before RB arrived Kane lost his grip and fell down pole head sat on. Taken by RB to PM. | No PM report but tissues sent to IDEXX: Necrosuppurative hepatitis (JC ?yersiniosis)  | Infectious                        | Necrotising hepatitis | No recognised pathogens isolated. | RB           |        |
| 43  | 30/04/2013    | 30/04/2013 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                 | LC0181 | M   | 13d        | NR          | NR              | NR       | Infected swelling left side of the neck  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 44  | 03/05/2013    | 03/05/2013 | Avian Psittacine      | African grey parrot      | <i>Psittacus erithacus</i>         | PEE001 | Unk | 11y        | 0.4         | NR              | NR       | None, found dead on floor of aviary partially eaten  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 45  | 04/05/2013    | 05/05/2013 | Mammal Other          | Black tailed prairie dog | <i>Cynomys ludovicianus</i>        | NR     | NR  | NR         | 0.9         | NR              | NR       | Overgrown teeth and very skinny, possibly weakened as not eating due to overgrown teeth  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 46  | 04/05/2013    | 05/05/2013 | Mammal marsupial      | Parma wallaby            | <i>Macropus parma</i>              | NR     | M   | NR         | 3.7         | 968000004254242 | NR       | Swelling on face, discharge from the eye, had 1ml engermycin for approx 10d  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 47  | 07/05/2013    | 07/05/2013 | Avian other           | Little egret             | <i>Egretta garzetta</i>            | NR     | NR  | NR         | 0.5         | No ID           | NR       | Found on floor, very unsteady on feet, possibly flew into something, no obvious wounds nor injuries, possible head trauma.   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 48  | 11/05/2013    | 12/05/2013 | Mammal Primate        | Belted ruffed lemur      | <i>Varecia variegata subcineta</i> | NR     | F   | 2d         | 0.05        | NA              | NR       | Blood around mouth/gum, quite skinny   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 49  | 18/05/2013    | 18/05/2013 | Mammal Hoofstock      | Reindeer                 | <i>Rangifer tarandus</i>           | NA     | F   | 1d         | 3.7         | NA              | NR       | Dehydration  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 50  | 23/05/2013    | 23/05/2013 | Mammal Primate        | Red ruffed lemur         | <i>Varecia variegata rubra</i>     | NA     | M   | 3d         | >0.05       | NA              | NR       | No hx  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 51  | 23/05/2013    | 23/05/2013 | Mammal Primate        | Red ruffed lemur         | <i>Varecia variegata rubra</i>     | NA     | M   | 3d         | >0.05       | NA              | NR       | No hx  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 52  | 26/05/2013    | 27/05/2013 | Mammal Primate        | Red ruffed lemur         | <i>Varecia variegata rubra</i>     | NA     | M   | 2d         | 0.1         | NA              | NR       | Lack of mother care  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 53  | 26/05/2013    | 27/05/2013 | Mammal Primate        | BW ruffed lemur          | <i>Varecia variegata rubra</i>     | NA     | M   | 2d         | 0.1         | NA              | NR       | Lack of mother care  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 54  |               | 28/05/2013 | Mammal marsupial      | Red kangaroo             | <i>Macropus rufus</i>              | NA     | F   | NR         | NR          | NA              | NR       | Animal had been treated for a few weeks with antibiotics for respiratory symptoms. It had shown nasal discharge, increased respiratory effort and been losing weight despite being seen eating every day.  | Gross PM pathology confined to the chest cavity, whole left side of the chest was a massive abscess with lots of thick green pus, there was no normal functional lung tissue left, the right side was affected also but not quite as severely, abdominal cavity was grossly normal.   | Pneumonia, pleurisy and pyothorax | Infectious            | NA                                | NA           | RB     |
| 55  | 30/05/2013    | 31/05/2013 | Mammal marsupial      | Red kangaroo             | <i>Macropus rufus</i>              | NA     | M   | 2.5m       | 0.176       | NA              | NR       | Mother died, tried to hand rear, eyes and ears still closed, so brain not fully developed  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 56  | 30/05/2013    | 01/06/2013 | Avian Sphenisciformes | Humboldt penguin         | <i>Spheniscus humboldti</i>        | SH0027 | NR  | 1m         | 0.35        | NR              | NR       | Smallest of two chicks, considerably smaller than sibling, possibly not getting enough food.   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 57  | 01/06/2013    | 01/06/2013 | Avian anatidae        | North American Wood duck | <i>Aix sponsa</i>                  | AS0031 | F   | NR         | 0.5         | NR              | NR       | Unknown  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 58  | 01/06/2013    | 04/06/2013 | Mammal Primate        | BW ruffed lemur          | <i>Varecia variegata variegata</i> | NR     | NR  | 3d         | 0.1         | NR              | NR       | Mum rejected and kept kicking out of nest box  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 59  | 04/06/2013    | 04/06/2013 | Mammal Primate        | BW ruffed lemur          | <i>Varecia variegata variegata</i> | VVV018 | M   | 9y         | 3.05        | 00-0648-5CA9    | NR       | Very lethargic, laid on side, runny muck, vomiting, towards end having small fits. Given cortisone, 250ml SC.  | PM confirmed the cause of death as haemorrhagic gastroenteritis, stomach lining was very inflamed and haemorrhagic, the duodenum was the same and filled with red/pink content, all other organs were grossly normal.   | Haemorrhagic gastroenteritis      | Infectious            | NA                                | NA           | RB     |
| 60  | 08/06/2013    | 20/06/2013 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                 | LC0185 | M   | 17d        | 0.1         | NA              | NR       | No hx  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 61  | 22/06/2013    | 22/06/2013 | Mammal Primate        | Hamadryas baboon         | <i>Papio hamadryas</i>             | PH0071 | NR  | NR         | 3.85        | NR              | NR       | Eyes swollen day before, very lethargic, not eating, possibly eaten plastic  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 62  | 25/06/2013    | 25/06/2013 | Mammal marsupial      | Western grey kangaroo    | <i>Macropus fuliginosus</i>        | NR     | M   | NR         | 1.2         | NR              | NR       | "Rory": gone blind with cataracts, RB said to change the milk to see if that helped, changed milk to cimicat and joey developed yellow diarrhoea, became very lethargic and floppy   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 63  | 27/06/2013    | 09/07/2013 | Mammal Primate        | Ring tailed lemur        | <i>Lemur catta</i>                 | NA     | NR  | Still born | <0.05       | NR              | NR       | Possible still birth   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 64  | 09/07/2013    | 09/07/2013 | Mammal Primate        | BW ruffed lemur          | <i>Varecia variegata variegata</i> | VVV072 | M   | 42d        | 0.05        | NR              | NR       | No hx  | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |
| 65  | 13/07/2013    | 20/07/2013 | Avian Psittacine      | Orange winged amazon     | <i>Amazona amazonica</i>           | AA0063 | F   | NR         | 0.3         | NR              | NR       | No visible signs of illness, eating well, moving around as usual, possibly old age   | No PM report  | Open                              | Open                  | NA                                | NA           | No vet |

| No. | Date of death | Date of PM | Taxa              | Species               | Species                              | ID     | Sex | Age  | Weight (kg) | Microchip       | Location | Hx   | Gross findings   | Diagnosis                       | Category           | Histology | Microbiology | Author       |
|-----|---------------|------------|-------------------|-----------------------|--------------------------------------|--------|-----|------|-------------|-----------------|----------|--|--|---------------------------------|--------------------|-----------|--------------|--------------|
| 66  | 22/07/2013    | 22/07/2013 | Mammal Primate    | BW ruffed lemur       | <i>Varecia variegata variegata</i>   | VVV071 | M   | 55d  | 0.7         | 956000001539149 | NR       | Attacked by an animal, lower abdomen torn open   | No PM report   | Open                            | Conspecific injury | NA        | NA           | No vet       |
| 67  | 31/07/2013    | 01/08/2013 | Mammal Other      | Red squirrel          | <i>Sciurus vulgaris</i>              | SC0004 | M   | NR   | 0.3         | MC0006133C96B   | NR       | Bite wound on neck filled with pus, 0.1ml pen strep x3d, possible death by infection   | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 68  | 06/08/2013    | 06/08/2013 | Mammal Chiroptera | Rodrigues fruit bat   | <i>Pteropus rodricensis</i>          | NR     | M   | NR   | 0.2         | NR              | NR       | Bite mark on wing joint, bone exposed, unable to use, wing blue sprayed, wing chewed by tamarin  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 69  | 13/08/2013    | 13/08/2013 | Mammal Chiroptera | Rodrigues fruit bat   | <i>Pteropus rodricensis</i>          | PR0132 | F   | NR   | 0.15        | 956000000247206 | NR       | Bone showing through on right wing, possibly chewed by tamarins  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 70  | 23/08/2013    | 23/08/2013 | Avian other       | Caribbean flamingo    | <i>Phoenicopterus ruber</i>          | PCR022 | NR  | NR   | 2.1         | 958000001370108 | NR       | Injury to ankle, skin grazed, after getting trapped  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 71  | 24/08/2013    | 24/08/2013 | Avian other       | White stork           | <i>Ciconia ciconia</i>               | CCC010 | NR  | 5y   | 2.25        | 968000004255477 | NR       | None - except the injury immediately before, otherwise in good health, broken left wing, possible emy attack, looked very shocked when found, stress likely cause (of death) | No PM report   | Open                            | RTA / Trauma       | NA        | NA           | No vet       |
| 72  | 30/08/2013    | 30/08/2013 | Mammal marsupial  | Parma wallaby         | <i>Macropus parma</i>                | MP0120 | M   | 2y   | 3.8         | 956000001209511 | NR       | Found in stream, possibly drowned  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 73  | 30/08/2013    | 30/08/2013 | Mammal marsupial  | Red kangaroo          | <i>Macropus rufus</i>                | MR0055 | F   | 9y   | 20.2        | 00-0634-11326   | NR       | No hx  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 74  | 30/08/2013    |            | Mammal Carnivore  | Amur tiger            | <i>Panthera tigris altaica</i>       | SL0034 | F   | 18y  | NR          | NR              | NR       | Lethargic, uninterested in food, weight loss, old age - sent to NMS  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 75  | 04/09/2013    | 04/09/2013 | Mammal marsupial  | Western grey kangaroo | <i>Macropus fuliginosus</i>          | MF0140 | M   | 4m   | NR          | 956000008246073 | NR       | Bleeding from nostrils, found dead this AM   | Externally no signs of injury, only a small amount of dried blood around the nostrils. Abdominal viscera NAD, GIT - scarring with evidence of prior constriction in one section of SI, passage of food still possible as faecal pellets in colon, stomach and intestinal tract filled with liquid digesta and a lot of gas, heart NAD, lungs pale pink viscera mottled with dark red multifocal areas, consistent through parenchyma and no consolidation present, thought of be PM change, trachea small amount of frothy red fluid present, thyroid glands approx 2cm in length, slightly enlarged? No definitive cause of death found at PM | Open                            | Open               | NA        | NA           | Rachel Sanki |
| 76  | 07/09/2013    | 07/09/2013 | Mammal marsupial  | Agile wallaby         | <i>Macropus agilis</i>               | MA0044 | M   | 3y   | 12          | 956000001228065 | NR       | Abscess on left side of face, given LA oxy over a period of 15d  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 77  | 07/09/2013    | 07/09/2013 | Mammal Primate    | Emperor tamarin       | <i>Saguinus imperator subgriseus</i> | NR     | F   | 9y   | NR          | 00-0634-1B87    | NR       | Unknown  | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 78  | 12/09/2013    | 12/09/2013 | Mammal Hoofstock  | Reindeer              | <i>Rangifer tarandus</i>             | RT0003 | F   | 7y   | 80 (est)    | 967000000705952 | NR       | Bloated stomach, regurgitating food, frothing nose, haemorrhagic gastroenteritis   | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 79  | 21/09/2013    | 22/09/2013 | Mammal Primate    | Ring tailed lemur     | <i>Lemur catta</i>                   | LC0163 | F   | 1y   | 1.65        | 956000008264041 | NR       | Killed by Tayra  | No PM report   | Open                            | Conspecific injury | NA        | NA           | No vet       |
| 80  | 23/09/2013    | 23/09/2013 | Mammal Chiroptera | Rodrigues fruit bat   | <i>Pteropus rodricensis</i>          | PR0194 | M   | 1y8m | 0.295       | 956000008246461 | NR       | Shivering continuously in dorsal recumbency, non-mobile, open fracture right metacarpal 5, tears left wing, trauma. Euthanased (shol)  | Head shot, open fracture right Mc5, tears to left wing, large swelling L caudoventral abdomen, thick SC fat layer, suspect lipoma, abdominal and thoracic viscera NAD  | Euthanased - traumatic incident | RTA / Trauma       | NA        | NA           | Rachel Sanki |
| 81  | 22/09/2013    |            | Mammal Primate    | Emperor tamarin       | <i>Saguinus imperator subgriseus</i> | SIS011 | F   | 4m   | NR          | 956000001512730 | NR       | Runny faeces, eating very little, given enrofloxacin, CCF.   | No PM report   | Open                            | Open               | NA        | NA           | No vet       |
| 82  | 25/09/2013    | 25/09/2013 | Avian Psittacine  | African grey parrot   | <i>Psittacus erithacus</i>           | NR     | NR  | NR   | NR          | NR              | NR       | Killed by Fennec fox   | No PM report   | Open                            | Conspecific injury | NA        | NA           | No vet       |
| 83  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 84  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 85  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 86  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 87  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 88  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 89  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 90  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 91  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |
| 92  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis           | <i>Threskiornis aethiopicus</i>      | NR     | NR  | NR   | NR          | NR              | NR       | Euthanased, one of 18, and x8 died when shut in as all pinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.                 | No PM report   | Open                            | Management         | NA        | NA           | No vet       |

| No. | Date of death | Date of PM | Taxa              | Species                     | Species                         | ID     | Sex | Age  | Weight (kg) | Microchip       | Location   | Hx  | Gross findings   | Diagnosis  | Category           | Histology | Microbiology | Author       |
|-----|---------------|------------|-------------------|-----------------------------|---------------------------------|--------|-----|------|-------------|-----------------|------------|---|--|--|--------------------|-----------|--------------|--------------|
| 93  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 94  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 95  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 96  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 97  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 98  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 99  | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 100 | 01/10/2013    | 01/10/2013 | Avian other       | Sacred ibis                 | <i>Threskiornis aethiopicus</i> | NR     | NR  | NR   | NR          | NR              | NR         | Died, one of 18, and x8 died when shut in as all plinioned birds in to control issue as fully winged birds euthanased - highly stressed prior to death.   | No PM report   | Open   | Management         | NA        | NA           | No vet       |
| 101 | 01/10/2013    | 02/10/2013 | Avian other       | Cattle egret                | <i>Bubulcus ibis</i>            | BI0001 | F   | 26m  | NR          | 250228500017790 | NR         | Traumatic injuries  | Wounds to head and neck, no feather or skin coverage over neck and dorsal cranium exposing underlying musculature and internal structures. Right wing Mc bones broken off at carpoMc joint, most primary feathers missing. No SC fat, liver possible slight enlargement, very little digesta in tract, AD viscera.   | Traumatic injuries / shock from attack by another bird | Conspecific injury | NA        | NA           | Rachel Sanki |
| 102 | 05/10/2013    | 05/10/2013 | Mammal Primate    | Common squirrel monkey      | <i>Saimiri sciureus</i>         | NA     | NR  | 1d   | 0.085       | NA              | NR         | Found on floor in AM, possibly dropped, hole in stomach and insides eaten.  | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 103 | 10/10/2013    | 10/10/2013 | Avian other       | Roseate spoonbill           | <i>Platalea ajaja</i>           | NR     | F   | NR   | 0.854       | Ring 94         | Quarantine | 20 birds imported from Cuba, 4 died, AHVLA investigation as in quarantine - no hx provided except AHVLA report. This bird died overnight following non-specific malaise treated with enrofloxacin   | AHVLA PM report non specific - virus isolation but no results.   | Open   | Open               | NA        | NA           | AHVLA        |
| 104 | 10/10/2013    | 10/10/2013 | Avian other       | Roseate spoonbill           | <i>Platalea ajaja</i>           | NR     | M   | NR   | 0.934       | Ring 82         | Quarantine | 20 birds imported from Cuba, 4 died, AHVLA investigation as in quarantine - no hx provided except AHVLA report. This bird died suddenly   | AHVLA PM report non specific - virus isolation but no results.   | Open   | Open               | NA        | NA           | AHVLA        |
| 105 | 10/10/2013    | 10/10/2013 | Avian other       | Roseate spoonbill           | <i>Platalea ajaja</i>           | NR     | NR  | NR   | NR          | NR              | Quarantine | 20 birds imported from Cuba, 4 died, AHVLA investigation as in quarantine - no hx provided except AHVLA report. This bird had no history  | AHVLA PM report non specific - virus isolation but no results.   | Open   | Open               | NA        | NA           | AHVLA        |
| 106 | 10/10/2013    | 10/10/2013 | Avian other       | Roseate spoonbill           | <i>Platalea ajaja</i>           | NR     | NR  | NR   | NR          | NR              | Quarantine | 20 birds imported from Cuba, 4 died, AHVLA investigation as in quarantine - no hx provided except AHVLA report. This bird had no history  | AHVLA PM report non specific - virus isolation but no results.   | Open   | Open               | NA        | NA           | AHVLA        |
| 107 | 20/10/2013    | 20/10/2013 | Avian other       | Cattle egret                | <i>Egretta garzetta</i>         | SC0005 | F   | 10y  | 0.4         | 96700000623678  | NR         | Very thin, a wet day prior to death, possibly wet, cold and malnourished, very dirty, possibly trampled.  | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 108 | 22/10/2013    | 22/10/2013 | Mammal marsupial  | Parma wallaby               | <i>Macropus parma</i>           | MP0108 | M   | 5m   | 1.2         | 956000001512947 | NR         | Intermittent diarrhoea over the past few weeks, he was found hiding in nest box, reluctant to move on 17/10, treated with supportive therapy for 4 d, found dead on 21/10   | Diarrhoea on base of tail, BCS poor, no other external abnormalities, very limited SC fat, liver slightly enlarged, adhesions between liver and other structures, kidneys and spleen NAD except PM change, GIT multiple adhesions from gut to gut wall, liver and body wall. Lungs PM change   | Adhesions, peritonitis                                 | Infectious         | NA        | NA           | Rachel Sanki |
| 109 | 25/10/2013    | 25/10/2013 | Mammal Primate    | Cotton top tamarin          | <i>Saguinus oedipus</i>         | SO0037 | F   | 19y  | 0.35        | 00F5 88E6       | NR         | Diarrhoea, lethargy, collapse, CCF, kaolin, baylri, SC warmed LRS, over past 4d, see vet diary  | Poor BCS, large bone callous left mid diaphysis femur, two fleas on carcass, 1x1.5cm liver lesion at hilus, mesenteric LN enlarged, autolysis  | Live abscess/neoplasia, enteritis                      | Infectious         | NA        | NA           | Rachel Sanki |
| 110 | 28/10/2013    | 28/10/2013 | Avian other       | Cattle egret                | <i>Egretta garzetta</i>         | BI0003 | F   | 1y5m | 0.3         | 250228500017943 | NR         | Traumatic wounds to the head, neck and both wings   | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 111 | 01/11/2013    | 01/11/2013 | Mammal marsupial  | Brush tailed bettong        | <i>Bettongia penicillata</i>    | BP0067 | F   | 5y   | 0.85        | 956000001204382 | NR         | Lesion on side of tongue, lump on left side of anus and tumour (large) in neck, suspected starvation due to inability to eat.   | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 112 | 07/11/2013    |            | Avian other       | Inca tern                   | <i>Laruscalus inca</i>          | NR     | M   | NR   | 0.2         | 3F117365        | NR         | Possibly cold, wet weather  | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 113 | 14/11/2013    | 14/11/2013 | Mammal Carnivore  | Giant otter                 | <i>Pteronura brasiliensis</i>   | NA     | M   | 2d   | 0.18 (est)  | NA              | NR         | Not fed by mother   | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 114 | 14/11/2013    | 14/11/2013 | Mammal Carnivore  | Giant otter                 | <i>Pteronura brasiliensis</i>   | NA     | F   | 2d   | 0.18 (est)  | NA              | NR         | Not fed by mother   | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 115 | 16/11/2013    | 16/11/2013 | Mammal Other      | Red squirrel                | <i>Sciurus vulgaris</i>         | SC0002 | M   | NR   | 0.25        | MC0006B3C2B4    | NR         | Off show most of the time, very hard to find, not in nest boxes, death unknown was seen previously with small wound on face, when found had been partially eaten by rats  | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 116 | 17/11/2013    | 17/11/2013 | Avian Galliformes | Tragopan (no species noted) | Unknown                         | NR     | F   | NR   | 0.55        | NR              | NR         | Unknown, partially eaten by rats  | No PM report   | Open   | Open               | NA        | NA           | No vet       |
| 117 | 22/11/2013    | 22/11/2013 | Mammal Carnivore  | Sumatran tiger              | <i>Panthera tigris sumatrae</i> | NR     | F   | NR   | NR          | "Alicia"        | NR         | Alicia had been fed as usual mid afternoon, shortly after this a member of the public reported she appeared to be choking, keepers ran immediately to check her, she was lying in view from the fence and was not moving, and no breathing movements of the chest could be seen. After a safe period of breathign signs or movement being seen keepers entered the enclosure and it was apparent Alicia was dead. | Cutting into the upper trachea and larynx I found this to be completely blocked by a chunk of meat, this chunk was attached to a larger piece of bony/grisly meat which was lodged partially in the upper oesophagus and partially still in the pharynx. The whole piece of meat was too large to be swallowed and had become lodged but it was extremely unlucky that a thin strand of meat had been inhaled into the larynx. | Apshyxia   | Husbandry          | NA        | NA           | RB           |
| 118 | 23/11/2013    | 24/11/2013 | Avian Galliformes | Tragopan (no species noted) | Unknown                         | NR     | F   | NR   | 0.85        | Blue CR         | NR         | Sat fluffed up down near mine shaft, brought inside and was bringing up brown watery liquid (vomil)   | No PM report   | Open   | Open               | NA        | NA           | No vet       |

| No. | Date of death | Date of PM | Taxa              | Species                  | Species                          | ID     | Sex | Age | Weight (kg) | Microchip                           | Location | Hx  | Gross findings  | Diagnosis  | Category     | Histology | Microbiology | Author       |
|-----|---------------|------------|-------------------|--------------------------|----------------------------------|--------|-----|-----|-------------|-------------------------------------|----------|---|---|--|--------------|-----------|--------------|--------------|
| 119 | 26/11/2013    | 26/11/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 0.9         | Leg band 83                         | NR       | This animal was found dead in enclosure this morning, this bird and 6 others had been isoalted due to weight loss for supplemental feeding and extra heat.  | Deep sores on plantar surface of all digits, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD         | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 120 | 27/11/2013    | 27/11/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | F   | 18m | 1           | Leg band no number, 528246002253028 | NR       | This animal was found dead in enclosure this morning, this bird and 6 others had been isoalted due to weight loss for supplemental feeding and extra heat. This bird had been assisted with feeding and had collapsed onto hocks, unable to stand for the past three days, yesterday it had regurgiated its feed  | No external injuries observed, No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea Nad, inactive ovary observed  | Emaciation, possible cold stress                       | Husbandry    | NA        | NA           | Rachel Sanki |
| 121 | 28/11/2013    | 02/12/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 0.83        | Leg band 89, 528246002250665        | NR       | This animal was found dead in enclosure this morning, this bird and 6 others had been isoalted due to weight loss for supplemental feeding and extra heat. This bird was found weak and unable to stand in enclosure this afternoon, no intervention was instigated as a concern of stressing the bird, collapsed slowly and died within 3 minutes of being found weak. | Sores on all digits beginning to heal, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD               | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 122 | 29/11/2013    | 03/12/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 0.95        | Leg band 90, 528246002252684        | NR       | This bird was found dead in enclosure this afternoon 29/11/13 after appearing slightly weaker during the day  | Deep sores on plantar surface of all digits, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD         | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 123 | 01/12/2013    | 03/12/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 0.792       | Leg band 93, 528246002253964        | NR       | This bird was found dead in enclosure in the morning 01/12/13   | Sores on plantar surface of all digits, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD              | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 124 | 01/12/2013    | 03/12/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 1           | Leg band 100, 528246002251879       | NR       | This bird was found dead in enclosure in the morning 01/12/13   | Sores on plantar surface of all digits, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD              | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 125 | 04/12/2013    | 04/12/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 0.855       | Leg band 81, 528246002250622        | NR       | This bird was found dead in enclosure in the morning 01/12/14   | Sores on plantar surface of all digits, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD              | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 126 | 05/12/2013    | 05/12/2013 | Avian other       | Roseate spoonbill        | <i>Platalea ajaja</i>            | NR     | NR  | 18m | 0.894       | Leg band none, 528246002250696      | NR       | This bird was found dead in enclosure in the morning 01/12/15   | Sores on plantar surface of all digits, pouch under bill appeared moderately dark red, suspect PM change? No Sc fat, no falciform fat and no omental fat, would classify as emaciated, gall bladder distended, kidneys NAD, GIT limited contents, heart, lungs and trachea NAD              | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 127 | 09/12/2013    | 10/12/2013 | Avian Galliformes | Kalj pheasant            | <i>Lophura leucomelanos</i>      | NR     | M   | NR  | 0.5         | Red PH                              | NR       | Emaciation, the bird was found this morning in enclosure having a seizure and neck bent in S bend unable to stand or hold up head   | No SC fat, falciform fat, nor omental fat, therefore would classify as emaciated, minimal breast muscle, 1/5 BCS, gall bladder distended with dark green bile, kidneys, GIT, heart, lungs trachea Nad, very little ingesta present  | Emaciation   | Husbandry    | NA        | NA           | Rachel Sanki |
| 128 | 10/12/2013    |            | Avian Galliformes | Glossy ibis              | <i>Plegadis falcinellus</i>      | NR     | M   | NR  | 0.374       | 972273000186492                     | NR       | Bird was separated from the group as seen to be weak and was found dead in the pen, broken right proximal metacarpals   | Complete fracture of proximal MC bones, SC emphysema, mild featehr loss and red skin over cranium, no SC fat, gall bladder distended, kindeys NAD, GIT NAD, testes observed.  | Fractured right metacarpals, poor BCS                  | RTA / Trauma | NA        | NA           | Rachel Sanki |
| 129 | 10/12/2013    |            | Avian Galliformes | Glossy ibis              | <i>Plegadis falcinellus</i>      | NR     | M   | NR  | 0.455       | 972273000215559                     | NR       | Bird was separated from group as seen to be weak, abrasions left foot   | Superficial red lesion central digital pad left foot, no SC fat, gall bladder distended, kindeys NAD, GIT NAD, testes observed.   | Cause of death suspect due to poor BCS in cold weather | Husbandry    | NA        | NA           | Rachel Sanki |
| 130 | 25/12/2013    | 06/01/2014 | Mammal Primate    | Ring tailed lemur        | <i>Lemur catta</i>               | LC0024 | M   | 11y | 2.45        | 00-0620-09F4                        | NR       | Swollen hind feet, and bellym laboured breathign and lethargic, tx with synulox, meloxicam and furosemide, frozen and defrosted for PME   | Liver light brown colouration, left lung mottled red and pink, right very little normal parenchyma, multiple firm masses throughout - mass in thoracic cavity compressing left lung, diaphragmatic mass protruding into thorax, mediastinal masses throughout, thoracic wall masses adhered | Neoplasia with metastases                              | Neoplasia    | NA        | NA           | Rachel Sanki |
| 131 | 27/12/2013    |            | Mammal Carnivore  | Asian small clawed otter | <i>Aonyx cinereus</i>            | NR     | M   | NR  | NR          | 00-0142-E7F4                        | NR       | Fell on electric fence  | No PM report  | Open   | Open         | NA        | NA           | No vet       |
| 132 | 27/12/2013    | 03/01/2014 | Mammal Other      | Capybara                 | <i>Hydrochaeris hydrochaeris</i> | HH0007 | F   | 4y  | NR          | 956000001414819                     | NR       | Wounds on left leg, abscess on front right foot, toenail ton, pen strep x6d, died from infection in foot.   | No PM report  | Open   | Open         | NA        | NA           | No vet       |