Pup mortality on Enderby Island – preliminary results

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CONTEXT

- NZSL population and pup mortality
- Disease
- NZSL TMP
18/19 FIELD SEASON

<table>
<thead>
<tr>
<th>2016/17</th>
<th>2017/18</th>
<th>2018/19</th>
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<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>32</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>43</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>82</td>
<td>58</td>
<td>44</td>
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</tbody>
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Total: 2016/17 = 82, 2017/18 = 58, 2018/19 = 44
2018/19 RESULTS

- 2 pups untagged – suspect Dundas pups
- Recorded sub-adult/adult mortalities = 5

### 2018/19

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<tr>
<td>Pup production est.</td>
<td>315</td>
</tr>
<tr>
<td>Pup mortality</td>
<td>44 (14%)</td>
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<tr>
<td>Post-mortems</td>
<td>35</td>
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PROVISIONAL DIAGNOSIS

- Unknown - Decomposed: 23%
- Infection: 59%
- Open: 7%
- Unknown - Scavenged: 7%
- Starvation: 2%
- Congenital: 2%
WARNING...PUS...
ABSCESS/INFECTION
ABSCESS/INFECTION
INFECTION - Klebsiella pneumoniae

- Gross pathology → presumptive diagnosis
- 22 cases with gross pathology suggestive of K. pneumoniae
- Sampling – confirming presence/absence
- Co-morbidity – ocular infections? Tag site infections? Hook work infections?
HOOKWORM
CONGENITAL
CONJUNCTIVITIS – OCULAR PATHOLOGY
LIMITATIONS AND FACTORS INFLUENCING MORTALITY RATE

- Field work times – sampling period
  - Periparturient deaths
  - Tagging vs dead runs
- Scavenging
- Sick pups – target monitoring/sampling
- Standardisation of autopsy technique, sample collection
- Pup Dispersal
PUP DISPERSAL

*Insert map with GPS points*
ACKNOWLEDGEMENTS

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