Appendix I
Bat Survey
Bat Survey

*Miniopterus schreibersii oceanensis*

Balmain (Thames Street) Wharf

Introduction

Eastern Bent-wing Bats are a listed threatened species. These bats have two known roost sites in the North Sydney precinct on Sydney Harbour: at Balls Head and at Primrose Park. The bats are occasionally recorded at other sites around the harbour and these records are presumed to be foraging bats that have dispersed from the known roosting sites (Hoye and Spence 2004). However, other minor roost sites are likely to be present that have not been recorded.

Methods and Results

In January 2012 Biosphere Environmental Consultants Pty Ltd were engaged to undertake a rapid assessment of the possible presence of Eastern Bent-wing Bats at or near a number of Sydney ferry wharves, including Balmain Thames Street Wharf.

On the late afternoon of the 15th of February 2012, Dr Arthur White visited the Mort Bay foreshore area of Balmain with the aim of pre-determining the most likely sites where Eastern Bent-wing Bats could be detected. In general, the bats prefer reasonably densely treed sites where there is little or no night lighting.

Mort Bay Park occupies all of the western side of Mort Bay and abuts the access road to the ferry wharf. There is a dis-continuous plantation of small trees around the bay foreshore that are unsuitable as bat foraging habitat. There were a few larger fig trees along Mort Street and Clayton Street that could possibly provide foraging habitat for these bats.

The Mort Bay area, including the approaches to the wharf, were traversed on foot before nightfall and the wooded areas nearby were scanned using a hand-held Anabat detector.
(White 2011). After nightfall, each site was surveyed another three times at various
intervals during the night to determine the presence of Eastern Bent-wing Bats.
Recording were taken at each site and later analysed using Anabat 5.0 software to
determine the species identity of the bat calls recorded. The recording details are
presented in Table 1 below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Times</th>
<th>Micro-Bats Detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balmain Wharf</td>
<td>7.00-7.10</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>8.00-8.10</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>9.00-9.10</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>10.00-10.00</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>11.00-11.10</td>
<td>Nil</td>
</tr>
<tr>
<td>Mort Bay Park</td>
<td>7.15-7.35</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>8.15-8.25</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>9.05-9.20</td>
<td>Nil</td>
</tr>
<tr>
<td>Mort St and Clayton St</td>
<td>7.45-7.55</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>8.35-8.45</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>9.30-9.40</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Discussion

No microbats were detected at the Balmain Thames Street wharf area or in Mort Bay
Park or in the nearby streets. There was little habitat for microbats near the Balmain
Wharf. Potential foraging habitat along Mort Street and Clayton Street may be
insufficient to attract microbats to the area.

Conclusion

Microbats do not appear to be present in the area around Balmain wharf probably because
of the scarcity of suitable foraging habitat for them in the area.
Dr Arthur White
20 February 2012

References

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schreibersii oceanensis* in disused military areas in eastern Sydney. In “The Biology and