Biodiversity Observations

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NESTING ASSOCIATION BETWEEN WEAVERS AND WARBLERS

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PHOtos of Weaver Nests (PHOWN) is a Virtual Museum, citizen science project of the Animal Demography Unit, to collect and monitor breeding distributions and colony sizes of weaver birds globally. This is the fifth paper in a series of exciting new results from PHOWN, the previous papers being Oschadleus et al. (2015a; 2015b).

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Introduction

Lesser Swamp Warblers Acrocephalus gracilirostris build a cup shaped nest in reeds (Hockey et al. 2005). It sometimes builds its nest underneath the nests of other birds (Hockey et al. 2005), but there do not seem to be any original records of this behaviour. In this note, several instances of warbler nests built under the nests of Cape Weavers Ploceus capensis are reported from Cape Town wetlands. The Cape Weaver prefers nesting in trees, but also nests in reed-beds (Tarboton 2011). Lesser Swamp Warblers breed from July to January and Cape Weavers from June to December, in the Western Cape (Hockey et al. 2005).

Methods

From 2006 onwards, weaver colonies have been monitored on an irregular basis on the Cape Peninsula, Cape Town. In the 2009 breeding season I monitored the most weaver nests in one season, particularly in wetlands on the Cape Peninsula, in order to ring the chicks in a study on their natal dispersal. Any nesting associations that were found, were recorded and photographed. In this paper, Lesser Swamp Warbler nests built below weaver nests are reported.

Results

Four Lesser Swamp Warbler nests were found directly below a Cape Weaver nest. The warbler nests were built several centimeters below a Cape Weaver nest, using the same reeds as supporting structures.

The first case was found at Intaka Island, Century City. A colony of over 50 weaver nests at Intaka was situated in reeds in one of the ponds and had nests of Cape Weavers and Southern Red Bishops Euplectes orix. The Cape Weavers in this colony bred from July to late September. In October I waded through the colony to check the bishop nests, which were still thought to be active. A Lesser Swamp Warbler nest was noticed that had been built directly underneath an old Cape Weaver nest, attached to the same reeds as the weaver nest. The warbler nest held three eggs on 16 October 2009. A week later two chicks had hatched and could be ringed but the third egg had failed. On 30 October the two chicks were well feathered, a few days before fledging, and were photographed without disturbing them (Fig 1).

The second example was a Lesser Swamp Warbler nest constructed underneath a Cape Weaver nest, found in reeds at the Athlone Sewage Works on 19 November 2009 (Fig 2). The warbler nest was old and empty, the chicks presumably having already fledged. This weaver colony had about 13 nests and was deserted in September.
Thus I did not check this colony again until I walked past by chance in November and noticed the warbler nest.

The third and fourth nests were found in reeds along a small channel running into the NW side of Zandvlei. Cape and Southern Masked Weavers *P. velatus* breed annually in the reeds along the channel. Two warbler nests were found under Cape Weaver nests within a few metres of each other. These were found on 12 November 2014 but warblers and weavers were no longer active at this site. Warbler Nest 1 was under a double weaver nest (site A12, Fig 3) and Nest 2 was under an old breeding weaver nest (site A14, Fig 4).

Interestingly, I monitored these weaver nests to see if *Dendromus* climbing mice would take over any weaver nests (Hunter 1961), and thus noticed the warbler nests on each visit. Warbler nest 1 had come slightly loose on the reeds and thus moved down by 28 December and by 18 January 2015 the warbler nest started breaking up.

Warbler Nest 2 was measured on 18 January: diameter 90 mm, depth 90 mm, cup depth 85 mm, and cup diameter 50 mm. This nest was still intact under the weaver nest on 17 May and thus lasted for several months after use. More interesting, however, is that on
Fig 3 - Lesser Swamp Warbler nest below a double Cape Weaver nest, at Zandvlei, from PHOWN 14005.

1 March 2015 I found that climbing mice had built their nest between the weaver and warbler nest after the weaver nest had slipped down onto the warbler nest. On 1 March 2 mice occupied the nest, but the mice were not recorded here in April.

Discussion
The records of warbler nests built just below Cape Weaver nests suggests that the warblers deliberately chose protected sites. The four warbler nests appear to have been constructed after the weavers had completed breeding, probably since the weavers may not have tolerated the warbler nests. The warbler nests were under Cape Weaver nests which are on average slightly larger than the nests of Southern Masked Weaver nests (although nest sizes of the 2 weavers do overlap); also Cape Weavers finish breeding sooner than the Southern Masked Weavers do, providing sheltered nest sites sooner. The nests were attached to the same reeds, slightly below the weaver nest. The weaver nest thus provided concealment from avian predators, e.g. crows, and from sun and rain although not much rain occurs in Cape Town from October to December. These warbler nests may also be more secure since the reeds were held together by the weaver nest as well. The weavers do not benefit from this nesting association, especially if they have completed breeding.
Lesser Swamp Warblers do not usually use the nests of other birds but Irwin (2009) recorded adults feeding their chicks in the old breeding nest of a Thick-billed Weaver *Amblyospiza albifrons* in Mkuse Game Reserve.

The nesting association of warblers and Cape Weavers has not been reported before. Hockey (*et al.* 2005) mentioned warbler nests under nests of larger birds, without further details.

Acknowledgements

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References


**Hunter HC 1961.** Parasitism of the Masked Weaver *Ploceus velatus arundinaceus*. Ostrich 32: 55-63


**Oschadleus HD, Werner L 2015a.** Number of nests owned by individual Cape Weaver males (PHOWN 4). Ornithological Observations, Vol 6: 197-201

**Oschadleus HD, Thorp C and Cronje P 2015b.** Southern Masked Weavers nest earlier in suburban than rural areas (PHOWN 3). Ornithological Observations, Vol 6: 68-72

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**Tarboton W 2011** Roberts nests & eggs of southern African birds. John Voelcker Bird Book Fund, Cape Town

Appendix. List of PHOWN records used in this paper (Appendix added 8 April 2017).

<table>
<thead>
<tr>
<th>No.</th>
<th>PHOWN</th>
<th>Locality</th>
<th>Date</th>
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<tbody>
<tr>
<td>1</td>
<td>14090</td>
<td>Intaka</td>
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</tr>
<tr>
<td>2</td>
<td>14089</td>
<td>Athlone</td>
<td>03/12/2009</td>
</tr>
<tr>
<td>3</td>
<td>14005</td>
<td>Zandvlei</td>
<td>12/11/2014</td>
</tr>
<tr>
<td>4</td>
<td>14395</td>
<td>Zandvlei</td>
<td>01/12/2014</td>
</tr>
<tr>
<td>5</td>
<td>14893</td>
<td>Zandvlei</td>
<td>01/03/2015</td>
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