

## Observation and comments on issues with bats in the ACE Paper 8/2023

Section	Observation/Comment
<b>Bats</b>	
Annex A	Item c) states that for bat surveys details of the survey methodology are provided in the report including ‘locations, frequency and duration spent in each Sub-Area’. This information is not provided in the report for the night-time bat surveys. Emergence times quoted in Table 4A i.e. <i>2-3 hours after sunset</i> , appear to be much later than the timing mentioned in Para 4.2.4 where bat emergence times are “ <i>close to and within a short time after sunset</i> ”.
4	The EIA Study Brief specifically requested the study team to “investigate and describe” the “roosting, breeding and/or feeding sites of .... Mammals”. This is still unaddressed.
4.2.2	<p>Various papers have highlighted the importance of conserving foraging habitats for bats. It is somewhat misleading to keep on highlighting the importance of roost while overlooking the importance of foraging sites, which will suffer direct loss due to the project. Foraging site fidelity has been observed in many studies as well.</p> <p>Selected Reference Material:</p> <ol style="list-style-type: none"> <li><a href="https://citeseerx.ist.psu.edu/document?repid=rep1&amp;type=pdf&amp;doi=e01eaea8a63487ad5049a10ad57d71c91d4ea05f">https://citeseerx.ist.psu.edu/document?repid=rep1&amp;type=pdf&amp;doi=e01eaea8a63487ad5049a10ad57d71c91d4ea05f</a></li> <li><a href="https://www.sciencedirect.com/science/article/pii/S0006320715300483">https://www.sciencedirect.com/science/article/pii/S0006320715300483</a></li> <li><a href="https://watermark.silverchair.com/78-1-1.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAr4wggK6BgkqhkiG9w0BBwagggKrMIICpwIBADCCAqAGCSqGSib3DOEHATAeBglghkgBZQMEAS4wEQQMOIExaaD70SDx7b9DAGeQgIICcZRS9DqnuE9xryE0KM7OnWNTu4c92BITII4B5dpP53_IESUwCNj9NOWZAEq-sY8L1cYMcD2aOxt6Y6G6oFw2GleAbJxpX58H_-oOWUsQIw92OSYSa2nIy0nNBmqKTeQtOQwXFiah8IGdhTcE6kqYA-VBHiU6OahgqimUyx9nbt5r1Jbd9IY98bR9rs70LeQbhfXMI3LT_0g5UwtwKTMkho0rBTF3ggxI-5K5tB8EtSV7UTVblz8NOTZLCivumrVspbyU48yudmqsr4RwZCvPFAC-tiWt86rj3grPbOU40VgV0MGTBhtcP_100Mlt1jNwS1nqyuMSHZa6tS_ zdaPmMVXHTK6BcWJ9exDS7mANf6EXsyoTFcipOJv mWJe4pt-AG9cd8rBDXK2fRkIJF72XFk3O7PiNzRZaUKWBZLpt46qTdwVbrrNL8YcBCi3WA1g5_PBKNMrMfMqbF-7TVxxMGSrf4WpxmZ8e0YkT2s0ds7uLAYnACwrPfxrzZN3ygCTOhuztHtXQ5YEwbPtUjgAsLd1TzmG0mhtGV-81pi_Jrrmp1ukgFp3vZmsEOAy9mYQax3j0wRJKRa_lrbmhTe4NeB2nRWX8FCfXehzz9QyYbs3ZvGOeaASA1XHpoqHeD3bdbD9busi_XXZnyYhb61-dPJKI0YX3tyoVqpPmcYYOXtmjTyVD7ZBWsUR5fw7uMaB0Kpdd1zMdsp3RZWksu9pt6AUAZj1gT-kw1v36e42U96I3dAhPzUv_J54NvjVgOCWOHMPH6_xOfAutFdmEUUCOXv_iyuLZP3Lv-6NQyThdyLoa7KnFBds9l_RvAPMAgP0">https://watermark.silverchair.com/78-1-1.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAr4wggK6BgkqhkiG9w0BBwagggKrMIICpwIBADCCAqAGCSqGSib3DOEHATAeBglghkgBZQMEAS4wEQQMOIExaaD70SDx7b9DAGeQgIICcZRS9DqnuE9xryE0KM7OnWNTu4c92BITII4B5dpP53_IESUwCNj9NOWZAEq-sY8L1cYMcD2aOxt6Y6G6oFw2GleAbJxpX58H_-oOWUsQIw92OSYSa2nIy0nNBmqKTeQtOQwXFiah8IGdhTcE6kqYA-VBHiU6OahgqimUyx9nbt5r1Jbd9IY98bR9rs70LeQbhfXMI3LT_0g5UwtwKTMkho0rBTF3ggxI-5K5tB8EtSV7UTVblz8NOTZLCivumrVspbyU48yudmqsr4RwZCvPFAC-tiWt86rj3grPbOU40VgV0MGTBhtcP_100Mlt1jNwS1nqyuMSHZa6tS_ zdaPmMVXHTK6BcWJ9exDS7mANf6EXsyoTFcipOJv mWJe4pt-AG9cd8rBDXK2fRkIJF72XFk3O7PiNzRZaUKWBZLpt46qTdwVbrrNL8YcBCi3WA1g5_PBKNMrMfMqbF-7TVxxMGSrf4WpxmZ8e0YkT2s0ds7uLAYnACwrPfxrzZN3ygCTOhuztHtXQ5YEwbPtUjgAsLd1TzmG0mhtGV-81pi_Jrrmp1ukgFp3vZmsEOAy9mYQax3j0wRJKRa_lrbmhTe4NeB2nRWX8FCfXehzz9QyYbs3ZvGOeaASA1XHpoqHeD3bdbD9busi_XXZnyYhb61-dPJKI0YX3tyoVqpPmcYYOXtmjTyVD7ZBWsUR5fw7uMaB0Kpdd1zMdsp3RZWksu9pt6AUAZj1gT-kw1v36e42U96I3dAhPzUv_J54NvjVgOCWOHMPH6_xOfAutFdmEUUCOXv_iyuLZP3Lv-6NQyThdyLoa7KnFBds9l_RvAPMAgP0</a></li> <li><a href="https://www.researchgate.net/profile/Winifred-Frick/publication/332146982_A_review_of_the_major_threats_and_challenges_to_global_bat_conservation/links/5f3efd24a6fdcccc43ddd1e5/A-review-of-the-major-threats-and-challenges-to-global-bat-conservation.pdf">https://www.researchgate.net/profile/Winifred-Frick/publication/332146982_A_review_of_the_major_threats_and_challenges_to_global_bat_conservation/links/5f3efd24a6fdcccc43ddd1e5/A-review-of-the-major-threats-and-challenges-to-global-bat-conservation.pdf</a></li> <li><a href="https://www.researchgate.net/profile/Andreas-Kiefer-2/publication/223849003_Foraging_site_fidelity_shapes_the_spatial_organisation_of_a_population_of_female_western_barbastelle_bats/links/5f46a005a6fdcc14c5c5ef01/Foraging-site-fidelity-shapes-the-spatial-organisation-of-a-population-of-female-western-barbastelle-bats.pdf">https://www.researchgate.net/profile/Andreas-Kiefer-2/publication/223849003_Foraging_site_fidelity_shapes_the_spatial_organisation_of_a_population_of_female_western_barbastelle_bats/links/5f46a005a6fdcc14c5c5ef01/Foraging-site-fidelity-shapes-the-spatial-organisation-of-a-population-of-female-western-barbastelle-bats.pdf</a></li> <li><a href="https://www.jstor.org/stable/1381433">https://www.jstor.org/stable/1381433</a></li> <li><a href="https://www.sciencedirect.com/science/article/abs/pii/S1616504707000572">https://www.sciencedirect.com/science/article/abs/pii/S1616504707000572</a></li> </ol>
4.2.3	Additional information on methodology for roosting bats has been provided. This makes it clear that surveys for roosts were only conducted along the transects and no bat roosts were recorded in the EIA Study. This approach covers only a small percentage of potential roost locations within the PDA and is therefore incomplete. This flaw in methodology has led to an incomplete data set which in turn has misled the Impact Evaluation and Mitigation Proposals.