

Wintering barnacle geese exhibit an increased behavioural drive for sleep after sleep deprivation without a clear EEG-based sleep rebound

Robin Pijnacker¹, Giancarlo Allocca^{2,3}, Alexei L. Vyssotski⁴, Peter Meerlo^{1#}, Sjoerd J. van Hasselt^{1#}

¹ Neurobiology Expertise Group, Groningen Institute for Evolutionary Life Sciences, University of Groningen, Groningen, The Netherlands

² Florey Department of Neuroscience and Mental Health, University of Melbourne, Parkville, VIC 3010, Australia

³ Somnivore Pty. Ltd., Parkville, VIC 3340, Australia

⁴ Institute of Neuroinformatics, Swiss Federal Institute of Technology (ETH) and University of Zurich, Switzerland

These authors contributed equally

Corresponding author

Peter Meerlo

Neurobiology Expertise Group

Groningen Institute for Evolutionary Life Sciences

University of Groningen

Nijenborgh 7

9747 AG Groningen

The Netherlands

p.meerlo@rug.nl

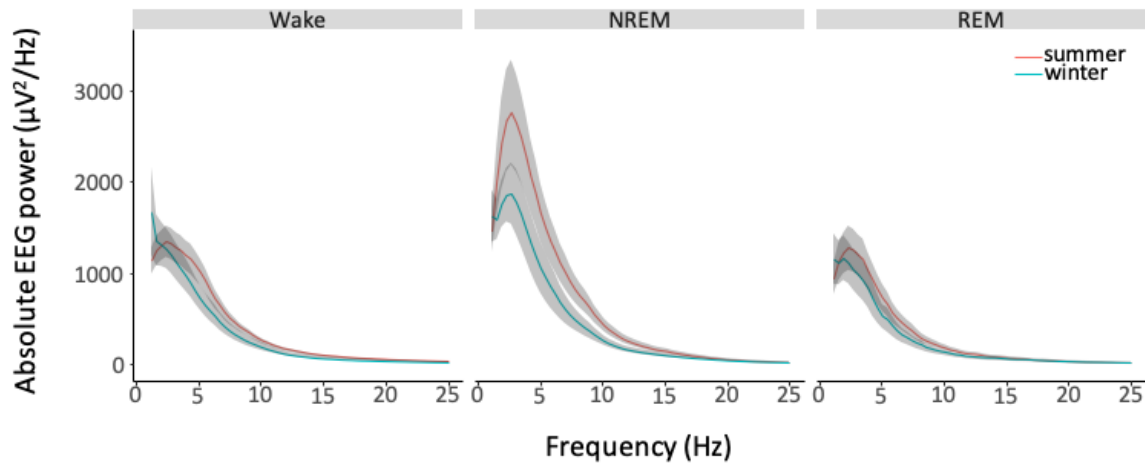


Figure S1. Averaged absolute EEG power based on artifact-free epochs of the three vigilant states of barnacle geese recorded in winter (blue) and summer (red). This figure is adapted from Van Hasselt et al., 2021.

Reference:

van Hasselt, S. J., Mekenkamp, G.-J., Komdeur, J., Allocca, G., Vyssotski, A. L., Piersma, T., Rattenborg, N. C., Meerlo, P. (2021). Seasonal variation in sleep homeostasis in migratory geese: a rebound of NREM sleep following sleep deprivation in summer but not in winter. *Sleep*, 44, zsaa244. Doi: 10.1093/sleep/zsaa244.