



UvA-DARE (Digital Academic Repository)

Scaring waterfowl as a management tool: how much more do geese forage after disturbance?

Nolet, B.A.; Kölzsch, A.; Elderenbosch, M.; van Noordwijk, A.J.

DOI

[10.1111/1365-2664.12698](https://doi.org/10.1111/1365-2664.12698)

Publication date

2016

Document Version

Other version

Published in

Journal of Applied Ecology

[Link to publication](#)

Citation for published version (APA):

Nolet, B. A., Kölzsch, A., Elderenbosch, M., & van Noordwijk, A. J. (2016). Scaring waterfowl as a management tool: how much more do geese forage after disturbance? *Journal of Applied Ecology*, 53(Special Feature: Model-assisted monitoring of biodiversity), 1413-1421. <https://doi.org/10.1111/1365-2664.12698>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)

Appendix S1. Additional figures



Fig. S1. One family of white-fronted geese equipped with numbered neck-collars and backpack GPS/Accelerometer tags during release. Picture G. Müskens

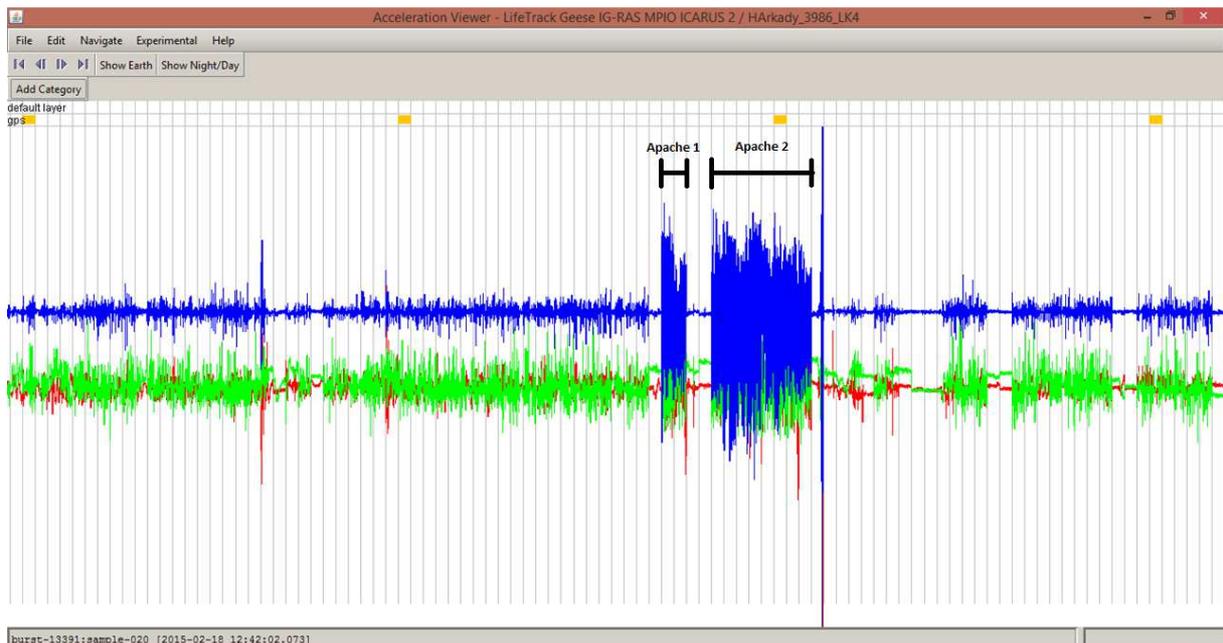


Fig. S2. Example recording (80 min) of accelerometer on three axes (blue, green and red traces) made visible in Movebank Acceleration Viewer. Vertical lines separate recordings (5 s min^{-1}). Orange blocks on top row indicate measurements of GPS positions. Indicated are two flights caused by a disturbance (in this case by helicopters flying overhead shortly after one other).

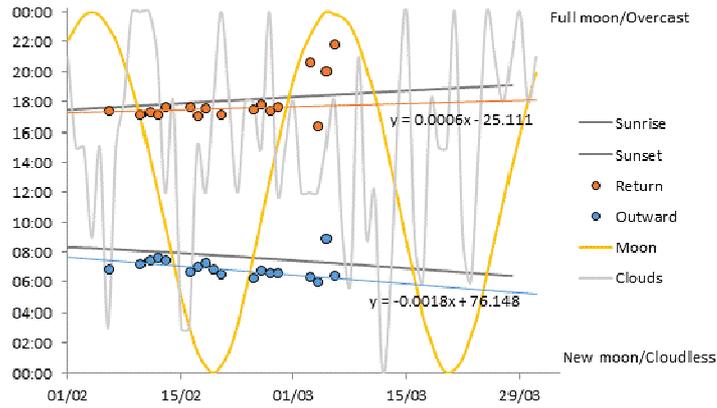


Fig. S3. Timing of roost flights relative to sunset and sunrise of nine focal wintering white-fronted geese tracked for two days each. Moon phase and cloud cover (on scale 1-9) are also indicated. Linear regressions without outliers.

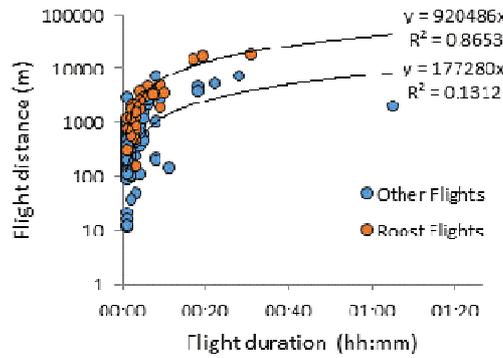


Fig. S4. Flight distance against flight duration (as estimated from accelerometer recordings) of roost flights and other flights of nine focal wintering white-fronted geese tracked for two days each. Lines are linear regressions plotted on a semi log-scale for clarity.

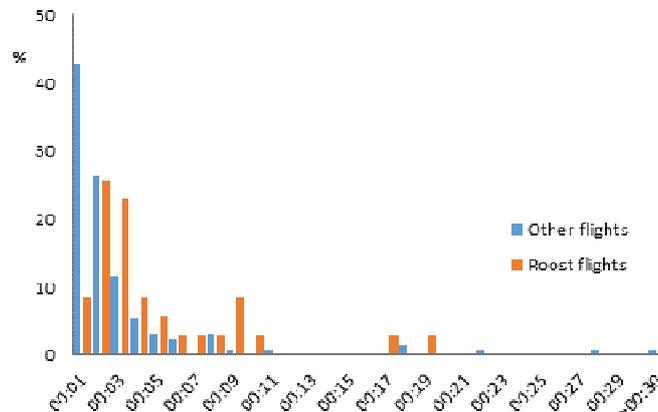


Fig. S5. Distribution of durations of roost flight ($N = 35$) and other (=non-roost) flights ($N = 129$) of nine focal wintering white-fronted geese tracked for two days each.

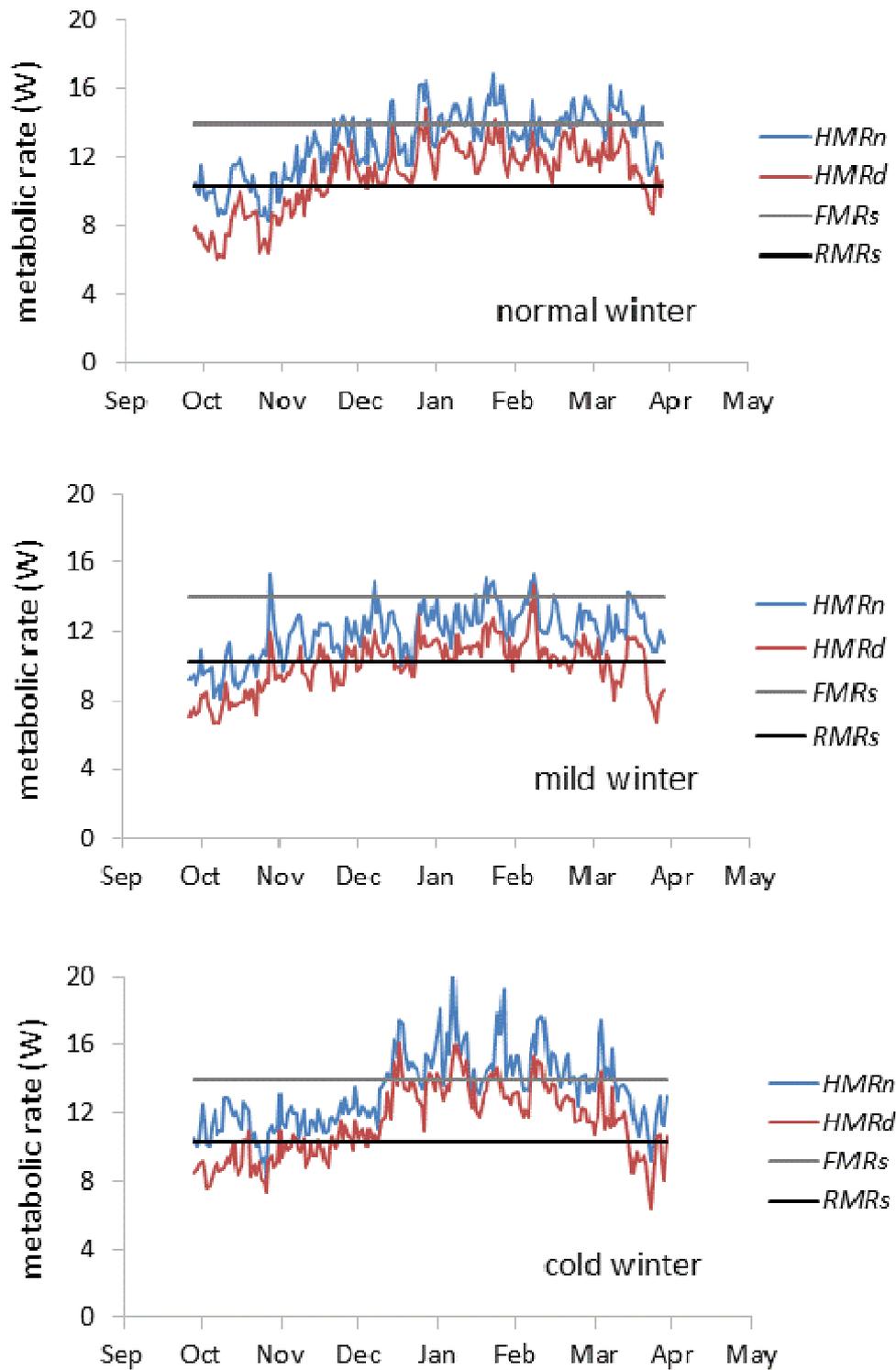


Fig. S6. Calculated metabolic rates in three types of winter. Standard resting and field metabolic rate (RMR_s and FMR_s) compared to heating metabolic rates during the day (HMR_d) and night (HMR_n) in a mild, normal, and cold winter (in the scenario that geese can forage into the night).