



INTRODUCTION:

This study aimed to document what understanding horse owners of different experience have about equine sleep compared to current knowledge in the field of equine sleep research, and to establish whether owners consider sleep important relative to welfare and performance. In addition this study used social media to communicate findings to participants with the aim of increasing awareness and knowledge of equine sleep for horse owners.

METHODS:

- An online mixed methods questionnaire created on Google Forms was piloted before distribution via social media platforms from 13/11/2019 (closing 31/03/2020).
- In total 582 responses were gained via convenience and snow-ball sampling.
- Thematic analysis was used to identify the higher level themes emerging from answers describing signs that horse owners used to detect sleep.
- Single Factor ANOVA tested differences ($P > 0.05$) between participant groups separated by years of horse ownership/experience (1-5 years, 6-15 years, 16-25 years, 26+ years).

RESULTS:

Existing research suggests that horses sleep on average for 3 to 4 hours^{1, 2}. In the current study, 50% of respondents thought their horse slept for ≥ 4 hours whilst 17% were unsure how long their horse slept for (Fig. 1), 29% reported never considering the amount of sleep that their horse achieved (Fig. 2), and 55% did not attribute lethargy to lack of sleep (Fig. 3).

No significant differences ($P > 0.05$) were found between participant groups for: the number of hours respondents thought horses slept for; how often they considered the amount of sleep the horse had achieved; whether they attributed lack of sleep to lethargy in the stable/during exercise.

Higher level themes included 1) behavioural indicators e.g. mood/ alertness, and 2) signs of recumbency e.g. stable stains/bedding on body/rug and flattened bedding. A small proportion (11%) of participants a) assumed their horse slept without looking for signs b) were unsure of signs c) didn't answer.

CONCLUSIONS:

Results suggest uncertainty amongst participants about the amount of sleep their horse 1) achieves and 2) requires. Some participants did not consider whether sleep occurred. Years of experience as a horse owner did not influence responses. Sleep does not appear to be consistently considered by horse owners relative to equine wellbeing, despite its function relative to body maintenance and memory consolidation³.

The findings from the study are currently under public consultation (please see '**Nocturnal equine behaviour group**' <https://www.facebook.com/groups/753699465073014> for live presentation of this process).

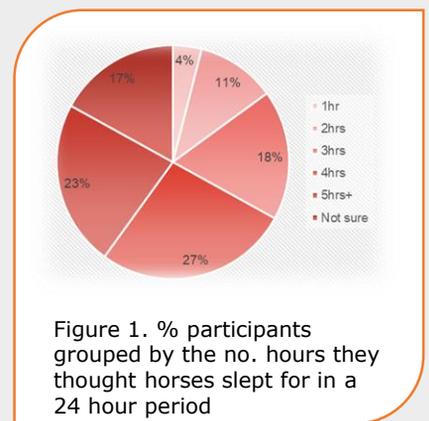


Figure 1. % participants grouped by the no. hours they thought horses slept for in a 24 hour period

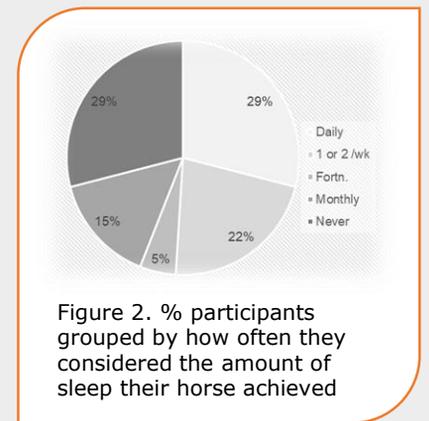


Figure 2. % participants grouped by how often they considered the amount of sleep their horse achieved

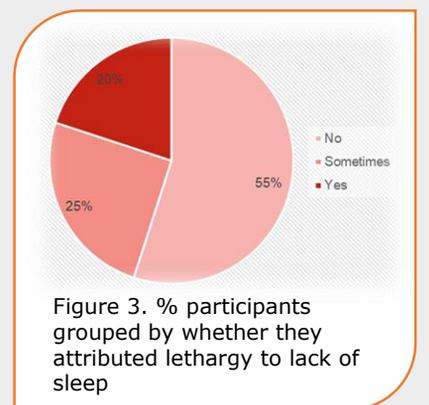


Figure 3. % participants grouped by whether they attributed lethargy to lack of sleep