

Nightly selection of resting sites and group behavior reveal anti-predator strategies in giraffe

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Abstract

This study presents the first findings on nocturnal behavior patterns of wild Angolan giraffe. We characterized their nocturnal behavior and analyzed the influence of ecological factors such as group size, season and habitat use. Giraffe were observed using night vision systems and thermal imaging cameras on Okapuka Ranch, Namibia. A total of 77 giraffe were observed during 24 nights over two distinct periods – July-August 2016 (dry season) and February-March 2017 (wet season). Photoperiod had a marked influence on their activity and moving behavior. At dusk, giraffe reduced the time spent moving and increasingly lay down and slept at the onset of darkness. Body postures that likely correspond to rapid eye movement (REM) sleep posture (RSP) were observed 15.8 ± 18.3 min after giraffe sat down. Season had a significant effect with longer RSP phases during the dry season (dry: $155.2 \pm$

191.1 sec, n=79; wet: 85.8 ± 94.9 sec, n=73). Further analyses of the influence of social behavior patterns did not show an effect of group size on RSP lengths. When a group of giraffe spent time at a specific resting site, several individuals were alert (vigilant) while other group members sat down or took up RSP. Simultaneous RSP events within a group were rarely observed. Resting sites were characterized by single trees or sparse bushes on open areas allowing for good visibility in a relatively sheltered location.

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Files

No files are present for this dataset.

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