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## Poster Session 1 – Rodent Behaviour

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### 24 Hibernation patterns in free-ranging common hamsters (*Cricetus cricetus*)

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The aim of this study is studying winter activity and hibernation of the common hamster in the natural environment, but in the urban area. In Simferopol city (Crimea) lives one of the largest natural populations of the common hamster in Europe. In the Central City Park in 2015 we established an experimental plot of 2.2 ha. For the analysis of hibernation, 4 hamsters were chosen as focal animals. To record the body temperature, animals under anesthesia were implanted intraperitoneally by Petrovsky thermologgers (measurement interval - 30 min) and a radio transmitter to determine the location of the animal. Throughout the experiment (2015-2018), all animals lived in the park. The total number of hypothermic episodes in female is 11, in male is 11 and 12. All focal animals found hibernating, body temperature dropped up to +2.3 °C (for female) and +4.9 °C (for males). The maximum duration of hibernation episodes in male was noted at the end of December – beginning of January, in females – at the beginning of February. The maximum duration of a hypothermic episode in female and males is 5 days 15 hours. After restoring of the body temperature, the animal either remained in normothermia state for 19 days and 11 hours. The data obtained in Simferopol Park show that animals can start to hibernate quite late (at the end of December), but hibernation periods are finished very early (in late February - early March). The common hamsters from Simferopol have a short hibernation, which may be due to the presence of polyunsaturated fatty acids (PUFAs, particularly linoleic acid) in the diet (Siutz, et al., 2017). The RUFAs (LA) in large quantities are contained in walnuts. Walnuts are the main feed for common hamsters in the Simferopol park.

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Jens Jacob, Jana Eccard (Editors)

6<sup>th</sup> International Conference of Rodent  
Biology and Management  
and  
16<sup>th</sup> Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts



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**Bibliografische Information der Deutschen Nationalbibliothek**

Die Deutsche Nationalbibliothek verzeichnet diese Publikation

In der Deutschen Nationalbibliografie: detaillierte bibliografische

Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

ISSN 1868-9892

ISBN 978-3-95547-059-3

DOI 10.5073/jka.2018.459.000



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Printed in Germany by Arno Brynda GmbH, Berlin.