
Poster Session 1 – Rodent Behaviour

23 Hibernation performance in free-ranging common hamster (*Cricetus cricetus*)

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The most of hibernation studies carried out in artificial conditions with photoperiod and ambient temperature control. So, animals unlikely display in full such natural seasonal patterns as hoarding, burrow digging, nesting and temperature dynamics itself. The best decision is to follow hibernation in nature, although it is quite difficult and risky. On experimental plot in Central park of Simferopol city (Russia), 4 hamsters (3 males and 1 female) used as focal to study temperature patterns during 1 season each. Animals were implanted intraperitoneally by Petrovsky thermologgers (interval – 30 min) and by radiotransmitters to follow the location of the animal. The same number of individuals were either lost, early died or records were not full for analysis. All focal animals found hibernated, body temperature dropped up to +2.3 °C (in female) and +4.9 °C (in males). The total number of hypothermic episodes were 11 in female, 11, 12 and 13 in males. The maximum duration of hibernation episodes in males were noted at the end of December – beginning of January (5 days), in females – at the beginning of February (5 days). The longest normothermia period between hibernation episodes lasted for 19 days. The hamsters in the City park start hibernate quite late (early December), and finish not late as early March. Also we watched above the ground activity of some other animals on the plot any winter months. The short hibernation of the Common hamster in Simferopol compare to other known data on this species in labs may be explain by good food resources here (walnuts, Gleditschia, hazelnut). These fruits probably reached by polyunsaturated fatty acids (for instance, linoleic). As shown by C. Siutz et al. (2018) such diet forward shortening of hibernation. The study was supported by RFBR 17-04-01061.

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6th International Conference of Rodent
Biology and Management
and
16th Rodens et Spatium

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Book of Abstracts



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