
Poster Session 1 – Rodent Management

28 Phenology of Norway rats, *Rattus norvegicus*, in the sewer system of Barcelona (Spain)

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Norway rats are a synanthropic species and they represent a problematic pest species in cities all around the world. Effective surveillance and control strategies demand information on the biology, ecology and behaviour of this species. Norway rats can reproduce all year round, declining activity in winter, especially where temperature drops under 0 °C. The Agència de Salut Pública de Barcelona, in the framework of the rodent surveillance and control program carried out in the city, started, in 2016, a project that included a study on the biology and ecology of the brown rat population in Barcelona. From December 2016 to November 2017, a total of 580 Norway rats were captured with kill traps placed in the accessible sewer system of the city. All dead rats were dissected, and we determined their sex, age and reproductive activity. The results show that in winter, both male and female rats have the highest rates of sexual inactivity (30%-60% for males and 40%-55% for females), while most of them are active for the rest of the year. Although temperature inside the sewer system of Barcelona rarely descends under 10 °C, reproductive activity apparently stops during the months of December and January. The highest frequencies of pregnant females and females with scars in their uterus were found from March to June, suggesting a reproductive peak in spring, and contrary to what other authors have reported, no reproductive peak was found in autumn. The results of the present study will be very useful to the design of surveillance and control strategies for this species in the city.

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Jens Jacob, Jana Eccard (Editors)

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

Potsdam, Germany, 3-7 September 2018

Book of Abstracts



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