Data Paper

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Commensal small mammal trapping data in Southern Senegal, 2012–2015: where invasive species meet native ones

Laurent Granjon,[1,5] Odile Fossati-Gaschignard,[1] Emmanuelle Artige,[1] Khalilou Bâ,[2] Carine Brouat,[1] Ambroise Dalecky,[3] Christophe Diagne,[1,2] Mamoudou Diallo,[2] Philippe Gauthier,[1] Pascal Handschumacher,[4] Mamadou Kane,[2] Lætitia Husse,[2] Youssoupha Niang,[2] Sylvain Piry,[1] Nathalie Sarr,[2] Aliou Sow,[2] and Jean-Marc Duplantier[1]

[1]*Centre de Biologie pour la Gestion des Populations (CBGP, IRD, CIRAD, INRAE, Montpellier SupAgro, Universite Montpellier), 755 Avenue du Campus Agropolis, Campus de Baillarguet CS 30016, Montferrier/Lez Cedex 34988 France*
[2]*Centre de Biologie pour la Gestion des Populations (CBGP – UMR22 IRD), Laboratoire BIOPASS2, Campus IRD-ISRA de Bel-Air, BP1386, Dakar CP18524 Senegal*
[3]*Laboratoire Population Environnement Développement (LPED – UMR 151 IRD), IRD/Aix Marseille Universite, Centre St Charles, case 10, 3 place Victor Hugo, CS 80249, Marseille, Cedex 03 13331 France*
[4]*SESSTIM, Sciences Economiques & Sociales de la Santé & Traitement de l'Information Médicale, Aix Marseille Universite/INSERM/IRD, 27 Boulevard Jean Moulin, Marseille Cedex 05 13385 France*

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Abstract. Describing patterns and testing hypotheses on processes driving biological invasions represent major issues in ecology. Addressing these questions requires building adequate data sets, i.e., covering areas and spanning periods adapted to the invasion processes studied. Rodents include major invasive species, among which the black rat *Rattus rattus* and the domestic mouse *Mus musculus* have nearly colonized the entire world, from their native Asian range. To do so, they have benefitted from their ability to cope with human-modified environments and to live in the immediate vicinity of Man, who served as a vector of their dispersal between regions and continents. In Senegal, both *R. rattus* and *M. musculus*, initially introduced by early West European colonizers some centuries ago, are currently expanding thanks to road traffic and infrastructure development and rampant urbanization that concerns even remote regions of the country. As part of projects aimed at studying (1) the role of invasive black rat populations in the emergence of zoonotic diseases in southeastern Senegal, and (2) the evolutionary consequences of parasites in *R. rattus* and *M. musculus* invasions in Senegal, we conducted a series of field campaigns throughout the southern half of the country, between May 2012 and September 2015. The objectives were to catch commensal small mammals using standard trapping procedures, identify them using morphological or molecular tools, and take samples from them upon autopsy, to look for zoonotic parasites and pathogens. Along with data on individual specimens, information on microhabitats was gathered at each trap position. This resulted in the constitution of a data set of more than 13,000 trapnights, which allowed the capture of more than 3,100 small mammals, all characterized by a series of associated biological, geographical, and environmental data. The small mammals concerned are mainly rodents (10 species), shrews, and hedgehogs. The two invasive rodent species were the most numerous, exceeding in numbers all the other species pooled. This data set makes it possible to study coarse to fine-scaled distribution of species of this commensal community in southern Senegal, as well as the possible determinants of this distribution in terms of habitat preferences and/or interspecific interactions. This data set can be freely used for non-commercial purposes and is licensed under a Creative Commons Attribution 4.0 International License.

Key words: biological invasion; community ecology; microhabitat description; Mus musculus domesticus*;* Rattus rattus*; rodents; Senegal; trapping.*

The complete data set is available as Supporting Information at http://onlinelibrary.wiley.com/doi/10.1002/ecy.3470.

Open Research

Associated data is also available on DataSuds: https://doi.org/10.23708/PQTQDA.

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[5]Corresponding Author. E-mail: laurent.granjon@ird.fr