

**HOW TO MAP OUT THE ROUTES OF WALKERS IN A FORESTRY ENVIRONMENT
CONSIDERED TO BE OF RISK? THE CASE OF HUMAN EXPOSURE TO LYME
BORRELIOSIS IN THE FOREST OF SENART (ÎLE-DE-FRANCE, FRANCE).**

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Well known in rural areas, Lyme borreliosis poses a new problem of public health in heavily urbanized spaces. While it is too early to say whether there is an emergence (or a re-emergence) of Lyme borreliosis in the Île-de-France region, however, it is necessary to take into account exposures and risk factors related to this disease, particularly for urban populations which are sometimes poorly informed about the risk of Lyme borreliosis. For instance, we need to do some research on the contacts between the routes that people follow in the forest and the spaces and environments considered to be of risk (e.g. the most suitable habitat for ticks). Indeed, as an essential component of risk assessment, the human factor, which is characterized by certain types of behaviours, such as the mode of penetration and the frequency of visits of endemic foci, is too often overlooked in studies on Lyme disease ecology. So, we have therefore carried out a number of inquiries on people who are doing some physical activities in the pilot site of the Forest of Sénart in 2009-2010. Such inquiries have recorded, by mapping, the routes followed by users, and by questionnaires, the socio-demographic parameters that are associated to each of them. Special attention has been paid to correctly identify time spent overall in the forest, the different paths that were used (including “off-tracks”), number of halts and time spent in specific area and specific behaviour possibly linked to increased exposure to ticks (and potentially to Lyme borreliosis). Another section of the present study is carried out, at the moment, to estimate tick abundance in Sénart forest (ticks sampling from the vegetation and from deer populations). It will then be possible to find how the structure of a forest area is likely to favour the contact between forest users and vectors of the disease; the outcome being the spacialization of this contact and to study ways in which it is possible to minimize risk via the landscape and design. The results show a forestry contrast between attractive and repulsive areas. However, the declarative method of itineraries reported by manual mapping must be compared with passive method to elucidate the behaviour of some walkers. In fine, this study deals with the issue of society’s vulnerability in relation to environmental health risks and looks particularly at how to manage the public’s use of forests in the context of an “emerging” health risk.