Modeling of human Exposure to Lyme disease Risk in a French forest Landscape

Vincent Godard
and
Kristell Méha, Chérif Benabderrahmane

The Lyme Disease in a Periurban Context
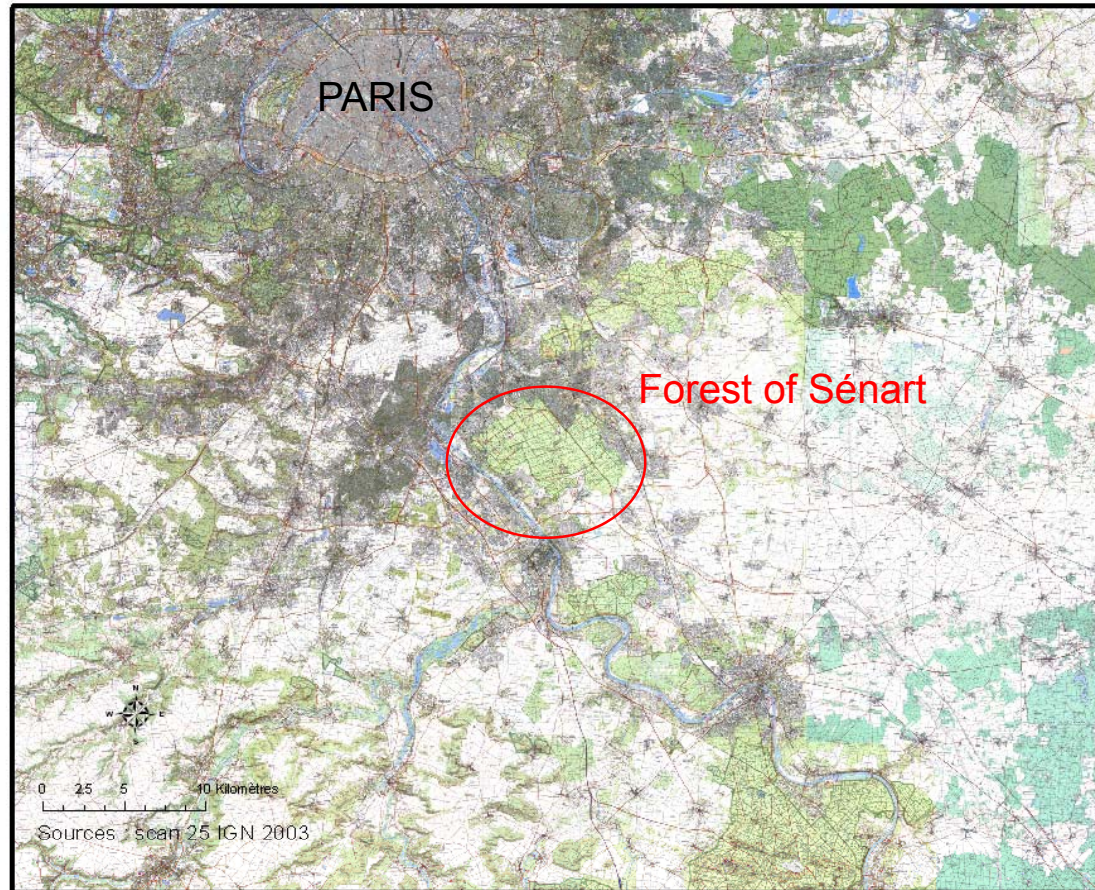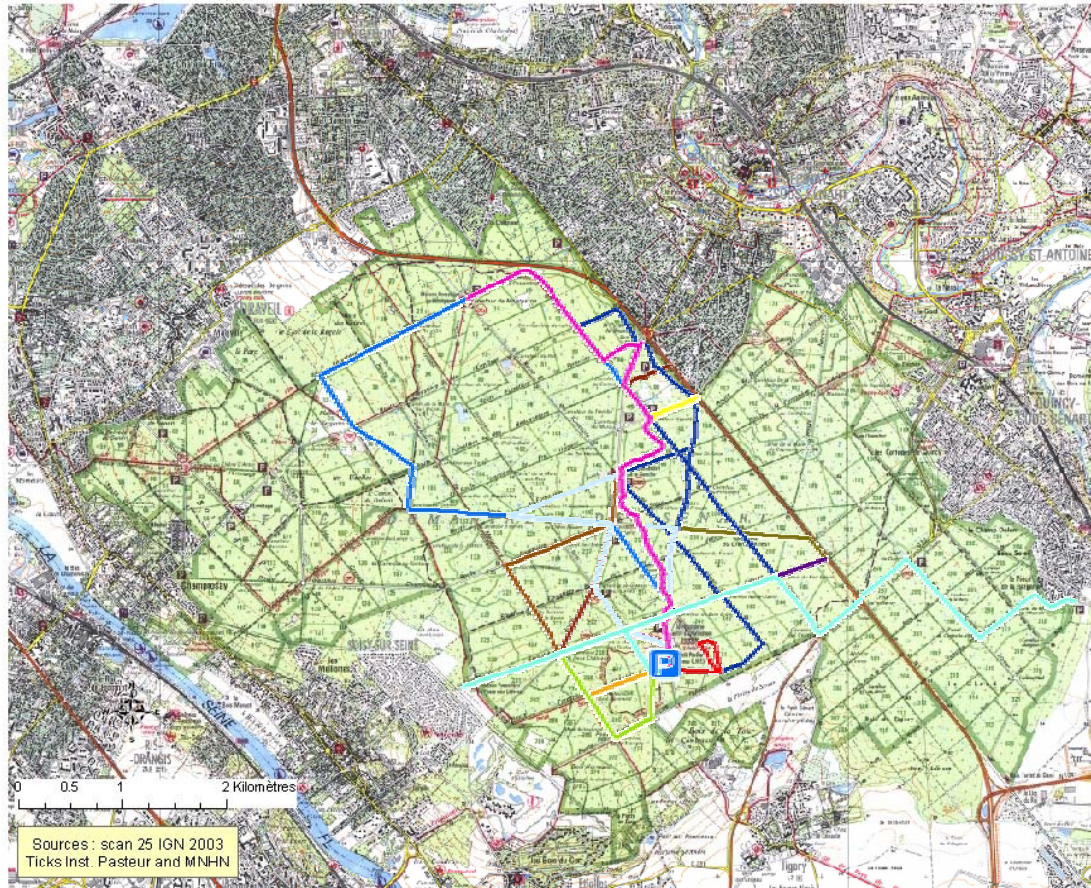
15 examples of paths in the Forest of Sénart

Sources : scan 25 IGN 2003
Ticks Inst. Pasteur and MNHN

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Quantifying the number of trips per section

Number of passages

	0
	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12
	13
	14
	15

What are the most popular forest stands?

Forest stand
- unknown
- futaie feuillue adulte
- futaie résineuse adulte
- jeune futaie résineuse
- jeunes peuplements
- milieux ouverts
- peuplements mixtes feuillus-résineux malvenants
- taillis simple
- taillis sous futaie agée
- taillis sous futaie d'age moyen
- taillis sous futaie jeune
- trouées
- vieille futaie feuillue
- Tracks for walkers
- P Place of survey

0 0.25 0.5   1 Kilomètres

Sources : scan 25 IGN 2003
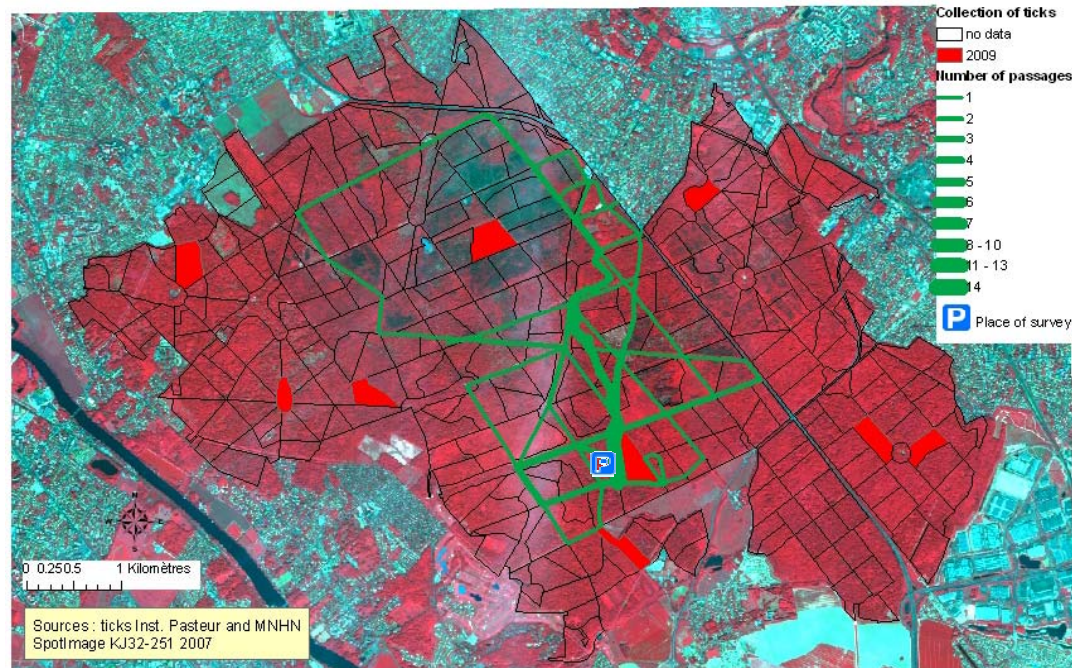Forest stand ONF

Are the ticky zones near most popular ways?

How to modelize the ticky zones?

Modelling a health risk in La Courneuve park (northern Paris)

Combining landscape elements associated with echinococcus egg conservation and use of the public park by susceptible individuals
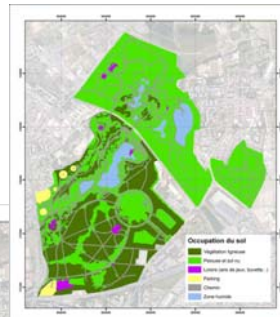

Landuse

Modelling conservation of pathogenic eggs

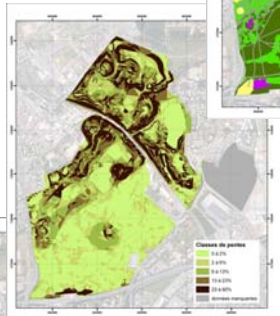- Risk mapping using multicriteria analysis

Slope

Aspect

Mapping the itinerary of susceptible individuals

- Itinerary map of linear trajectories from survey data

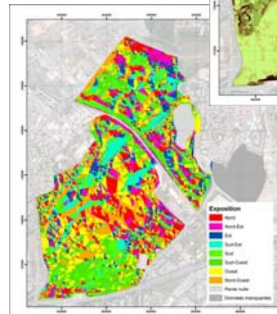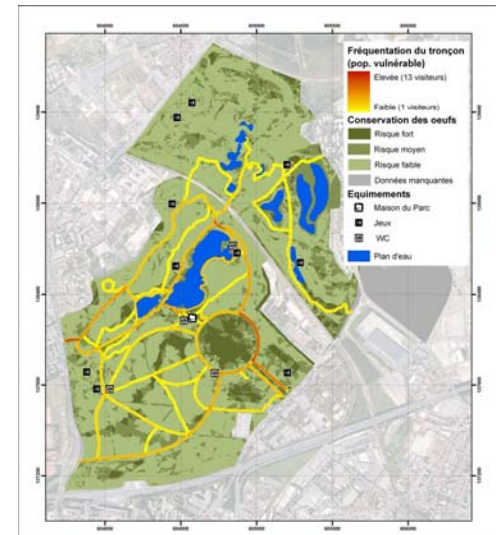- Cartographic synthesis of trajectories of individuals at risk

Risk exposure maps with a spatial itinerary analysis

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Conclusion:

We would like to realise a large scale map of exposure at Lyme disease by modelling:

- Itinerary map of linear trajectories of individuals at risk (survey data)

- Relation between ticks and forest habitat

It would be interesting and necessary to enlarge this study at other peri-urban places.

We hope that this research into modelling will incite you to work with us!

Thank you.

Vincent GODARD - vgodard@univ-paris8.fr