



International symposium

Urban wastelands: a form of urban nature?

The urban wasteland, spatial expression of a transition of uses : cross-media contributions art, ecology and geography

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Saint-Martin Meadow (Rennes-France) *29 hectares of vegetation in the urban center*



Meadow



Habitat



Brownfield



Undergrowth



Banks



Allotment gardens

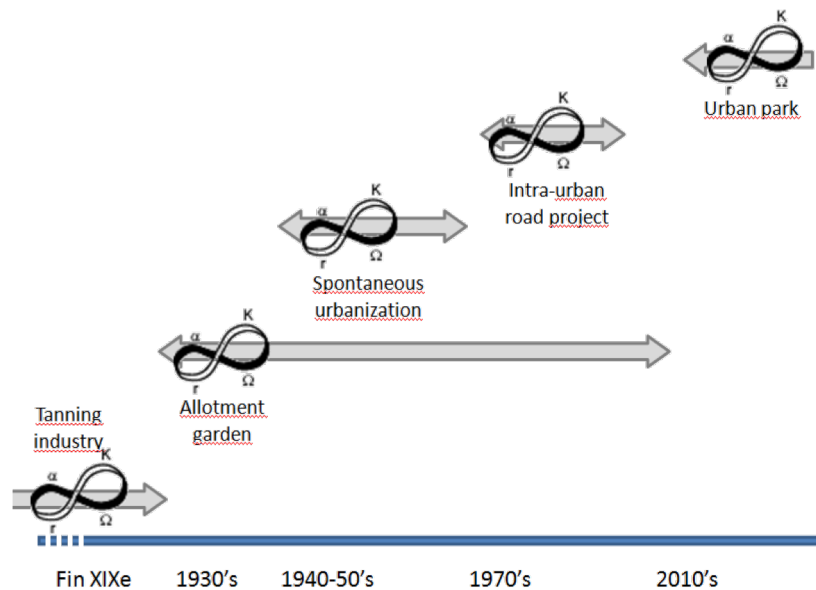


Bounded by the Canal Saint-Martin and the Ille, an enclave of 29 hectares of vegetation in urban center with a strong heterogeneity of landscapes.

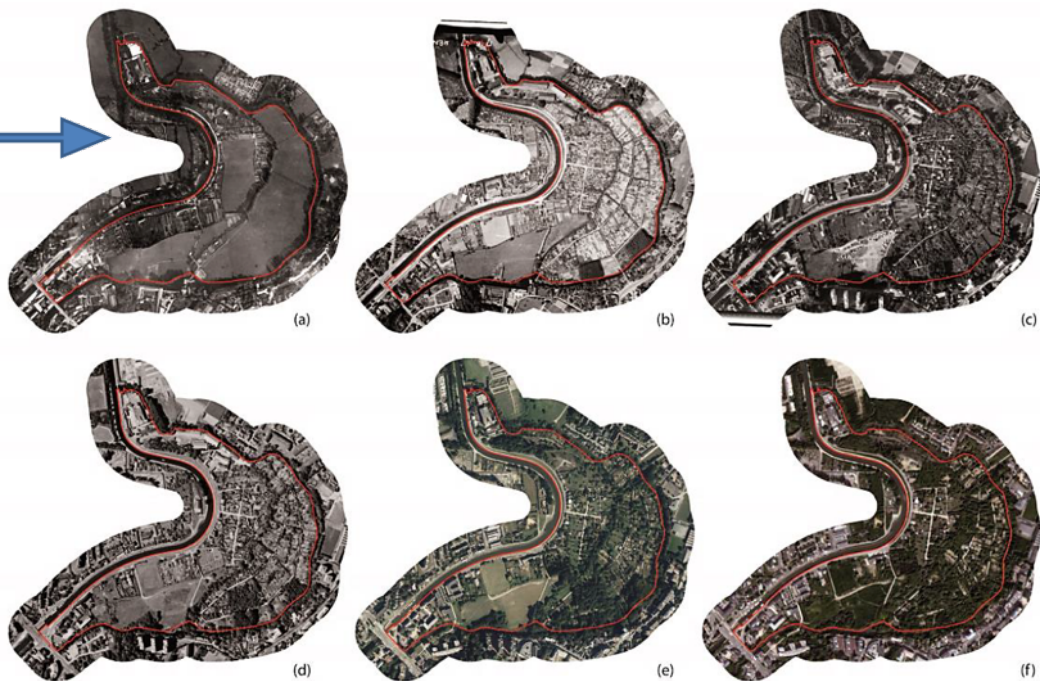


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Multiple stratifications of past uses
Progressive wasteland



Mosaic of aerial photography

- (a) 1924
- (b) 1947
- (c) 1970
- (d) 1990
- (e) 2010
- (f) 2013



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Coordinated by the base Agency, the urban natural park project aims to transform this space into recreational areas, meadows and wetlands.

2013-2016 progressive phases of trees cuts alternate with periods without activity.

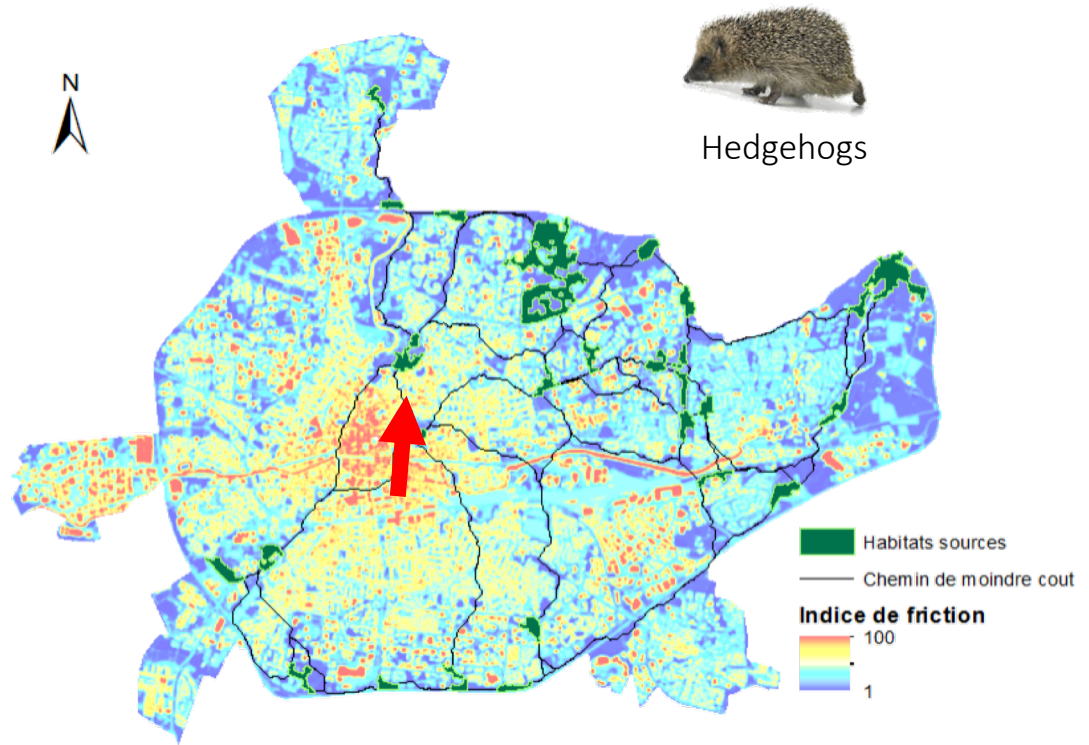
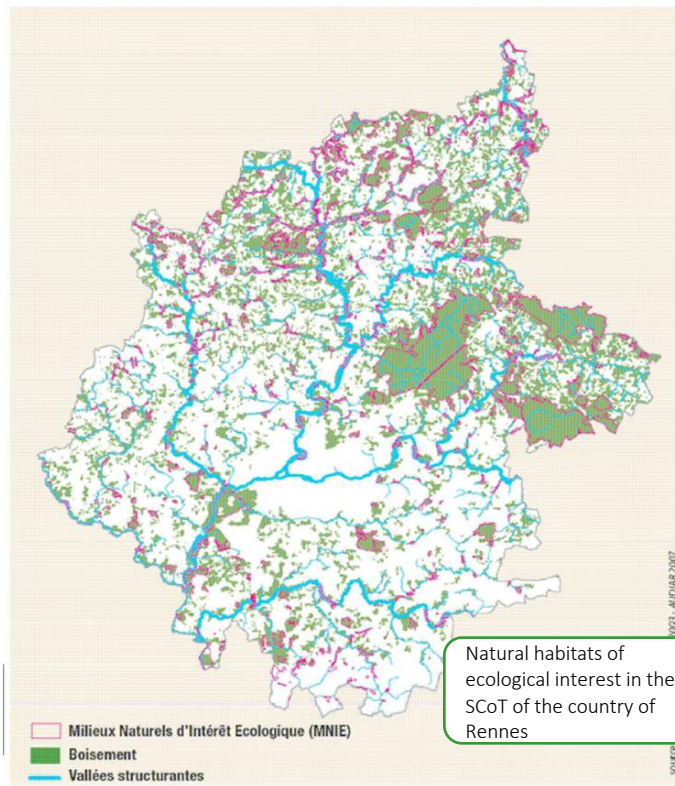


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A crossroads in the ecological belt network of the city

Milieux Naturels et réseau des vallées (cf. Annexe 4 à la fin du présent rapport de présentation)





Evolution of bird population (richness , abundance...)

Evolution of micro-mamal population (richness , abundance...)



Coll. Alain Butet
UMR Ecobio



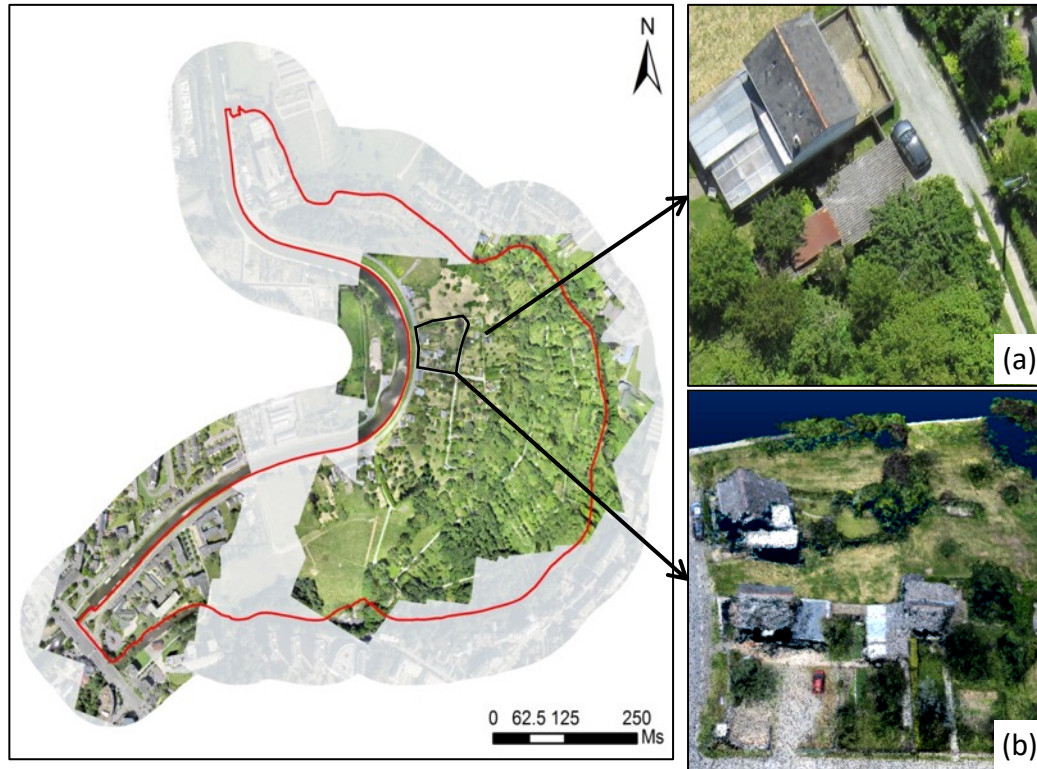
Coll. Matthieu
Beaufils,
Bretagne Vivante





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UAV data (2D / 3D)

Evolution of Landcover between 1924- 2013 (long term)

Evolution of Landcover during all the project with UAV (short term)

- High frequency
- High resolution
- 3D analysis (photogrammetry)





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Usage survey for two months (August-September 2015)



Entry no. 4



Entry no. 1



Entry no. 5



Entry No. 2



Entry No. 3

Observations/quantifications of modes of displacement, sociodemographic profiles, uses, directions, frequencies of passage

Total observation time in minutes	Number of people counted	Overall pass frequency (1 pers every X seconds)
2136	1341	96



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Landscape Photographic Observatory



From 2013 to 2017, 24 points of view photographed with large format camera four times a year.





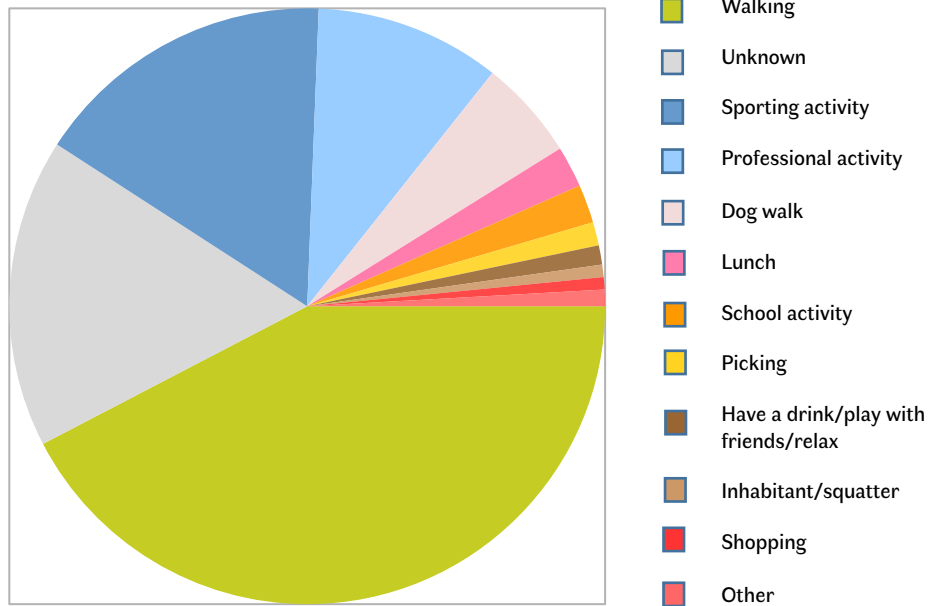
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Diverse anthropogenic uses of the site

- Walks
- Urban mobilities
- Sports
- Different types of squatt
- Legal habitats and gardens
- Glanage
- Barbecues, picnic etc.
- Games
- Fishing
- "Wild" gardens
- Squatt

Motifs de fréquentation des Prairies (Le Coz, 2015)





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Different types of habitats, sedentary and nomadic life modes



Landscape and use



- Squatt permanent construit
- Squatt permanent non construit
- Squatt occasionnel non construit
- Brownfield -meadows
- Houses dedicated to destruction
- Canal house
- Garden of the « longère »
- Meaddows
- Expropriated allotment gardens
- Undergrowth
- Voies bitumées
- Chemins carrossables
- Chemins non carrossables
- Chemins de traverse
- GR 39

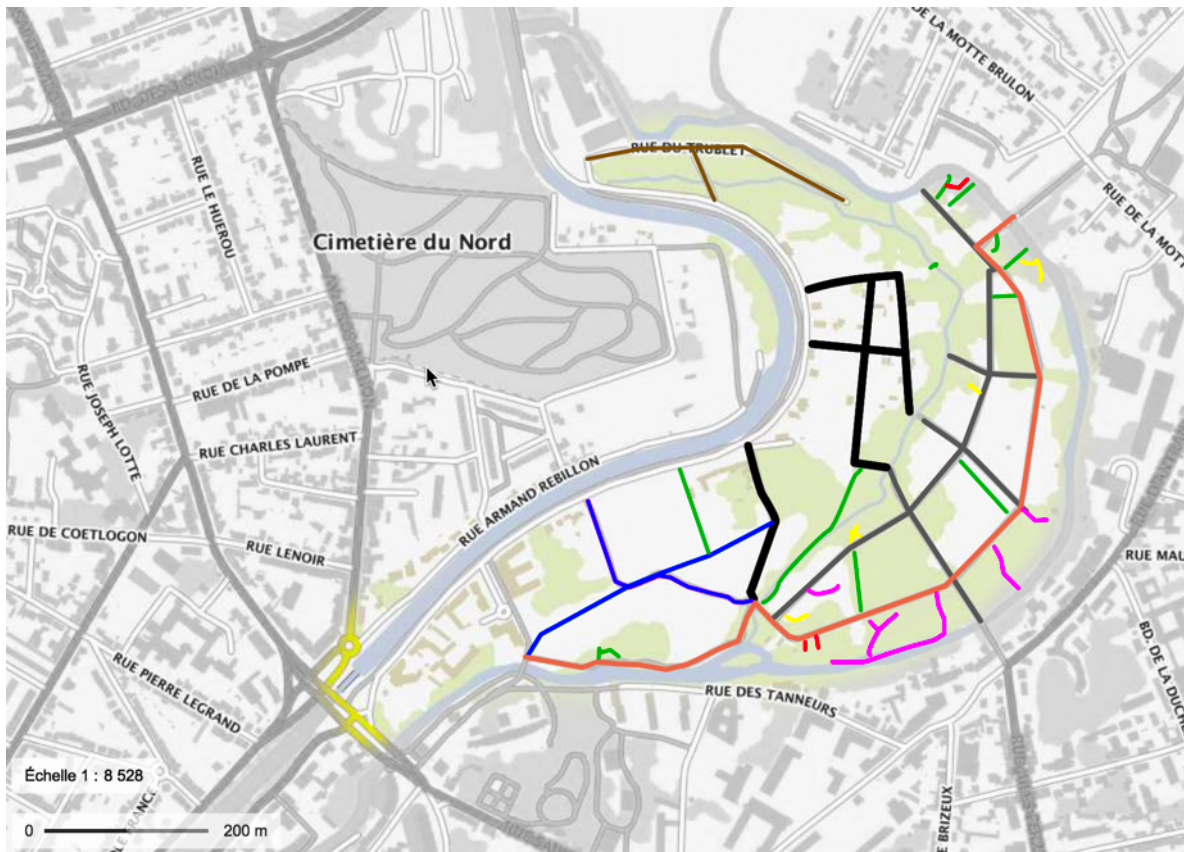




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Anthropogenic circulations : a well travelled space, soft links, cross-roads



- Asphalt road
- Driveway
- GR
- Abandoned road
- Trail
- Cross road
- Crossroad to a tent
- Crossroad to a squatt
- Crossroad to waste





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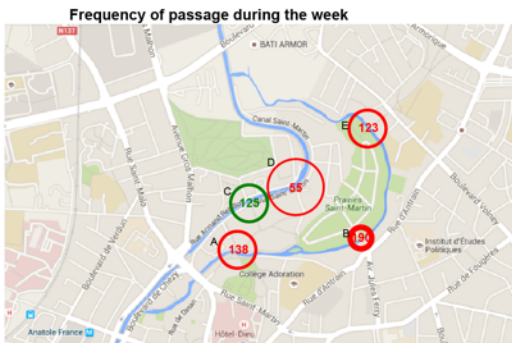
Lorem ipsum

Spatial and temporal comparison of the crossing frequency



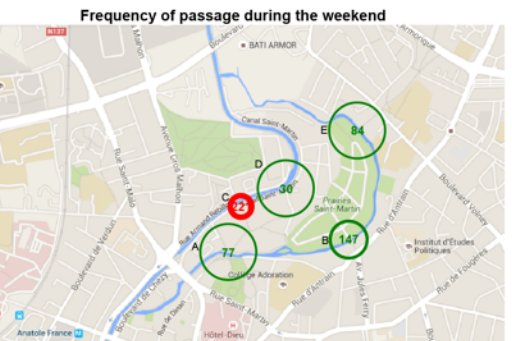
▲ North

- Frequency of passage between 1 personne/30s and 1 personne/90s
- Frequency of passage between 1 personne/90s and 1 personne/150s
- Frequency of passage between 1 personne/150s and 1 personne/221s



- Frequency of passage (1 personne/Xseconde) lower the global frequency
- Frequency of passage (1 personne/Xseconde) upper the global frequency

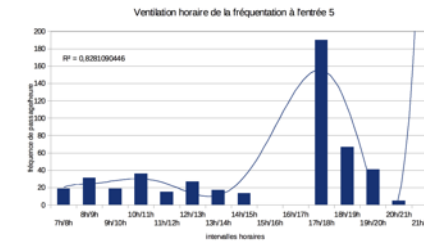
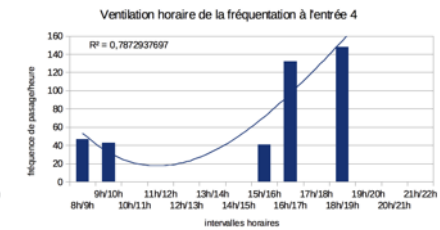
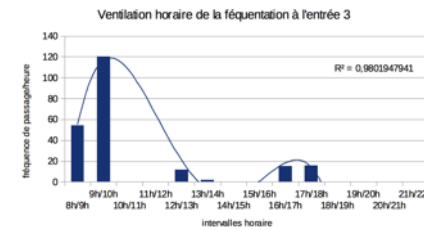
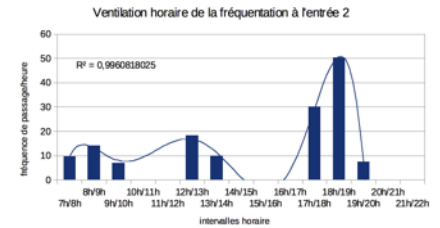
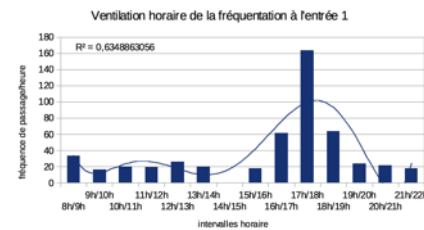
111 Frequency of passage



- A Entrée des Tanneurs
- B Entrée Jules Ferry
- C Entrée Canal Saint-Martin
- D Entrée Bon Accueil
- E Entrée de la Motte-Brûlon



Rhythm of anthropogenic uses





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Vegetation dynamics : some environments are stable



Z2SB5(5) 10/08/15



Z2SB5(8) 15/07/16



Z2SB5(12) 08/05/17



Z2J11(1) 04/07/14



Z2SB5(8) 06/07/15



Z2SB5(12) 08/05/17



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Vegetation dynamics : some environments are closing



Recolonization road by vegetation



Closing the environment with broom, maple, gorse



Closing the environment with willow

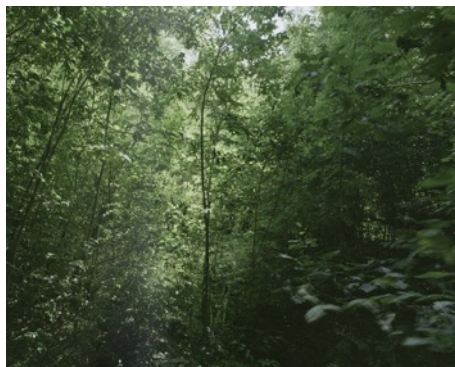




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Opening and closing of the environment : seasonality, flood





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Opening and closing of the environment : squat, circulation, wild gardens...





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Opening and closing of the environment





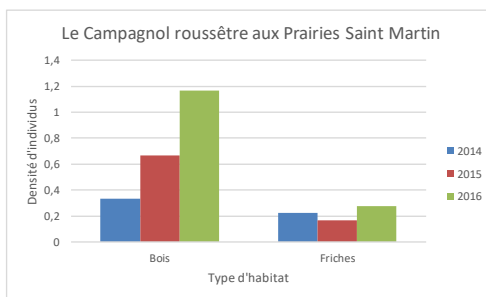
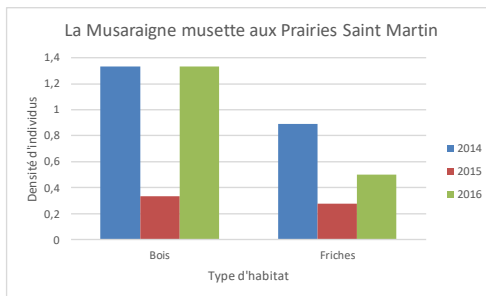
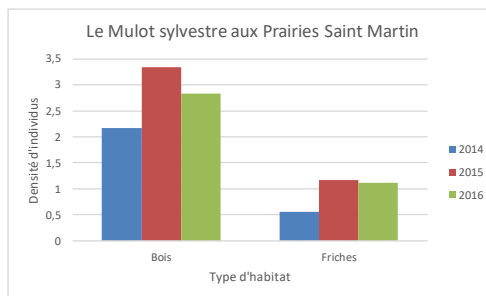
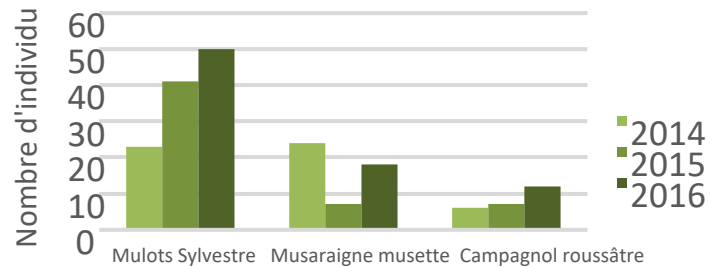
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Evolution of micro-mamal population

Micro-mamal

Prairies Saint Martin 2014 - 2016



Musaraigne musette



Mulot sylvestre



Campagnol roussâtre



Rat des moissons

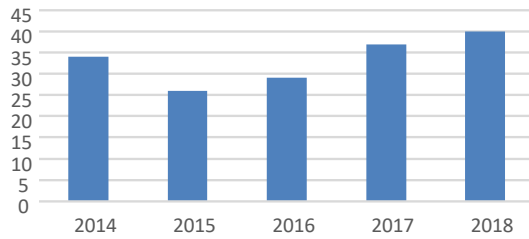


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Evolution of birds population

Number of species / Richness



Mésange bleue



Mésange charbonnière

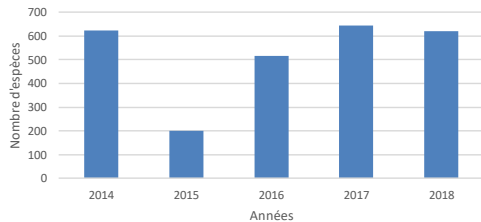


Troglodyte



Merle

Evolution du nombre de passereaux aux PSM entre 2014-2018



Touretelle des bois



Fauvette des jardins



Hypolaïs polyglotte

Abundance of birds



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Naturalness

- **Vegetal dynamics more or less spontaneous**
- **Biodiversity more or less stable**
- **Common species, domestic or wild, presence of wild species then less anthropic pressure**

Environment experience

- **Immersive experience of nature**
- **Feeling of being out of the city**
- **The closing of the environment implies a feeling of dilation of the space and increases the impression of naturalness .**
- **The partitioning of the spaces and the by-passes necessary to its crossing extend the paths.**
- **It induces a feeling of lower human density.**
- **Contrasted perceptions (fear / healing)**

Reserve area

- **Resourcing space for walkers**
- **Glanage**
- **Freedom for some and constraints for others :**
there are few facilities on site , the site is invested by artists, squatters etc.



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The naturalness of the site : a form of regulation of uses

Multiple margins – a space of/in transitions

- **Collective space/porosity between private space and public space**
- **Inhabited space frequented porosity between biodiversity/anthropic uses**
- **Hyrdolic network/hedges are vector of biodiversity life and barrier for men**

Regulation of uses

Through the cycle of seasons

By natural boundaries (waterways, floods, vegetation)



What is the evolution of nature ?

Wasteland	Building site	Urban natural parc
Few facilities	Creation of many facilities	What uses?
Polluted soils	Reengineered soils	Impact on biodiversity ?
Enclave/traffic area/crossroad	New circulations/gateways/signage spaces	What circulations ?
Natural barriers but few bans	Zoning protection system	Regulation effect ?
Dynamic landscape mutation	Upheaval	Dynamic ?
Squatt/marginality of users	Squatt decrease	Disappearance of the squatted houses What about tents?
Spaces of low anthropic pressure	Creating reserve space	Effect on biodiversity?
Spontaneous cycles where Self-managed spaces		Much more sophisticated management Municipality support Self-management?
Ordinary, common nature, Few seem hostile for certain or wild		"More qualitative" nature More sophisticated More polished



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From the ordinary nature to the staging of nature?





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