



Cities4Biodiversity

Second Deep-Dive Learning – Greening Cities

Paris Action Plan for Urban Nature and Biodiversity

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Paris greater urban area

12 000 km²
12 million inhabitants



City of Paris

100 km²
2,27 million inhabitants



London

1 500 km²
9 million inhabitants

Rome

1 300 km²
2,8 million inhabitants

Berlin

900 km²
3,7 million inhabitants



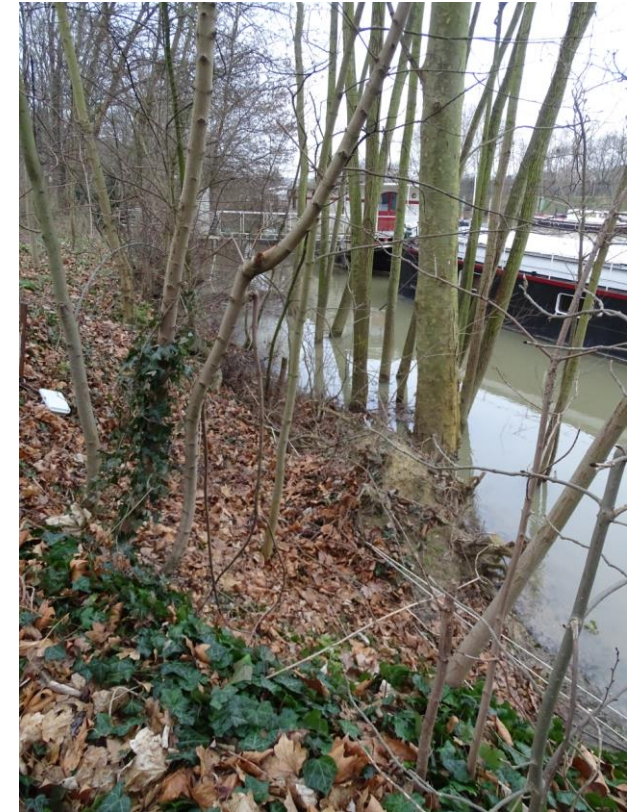
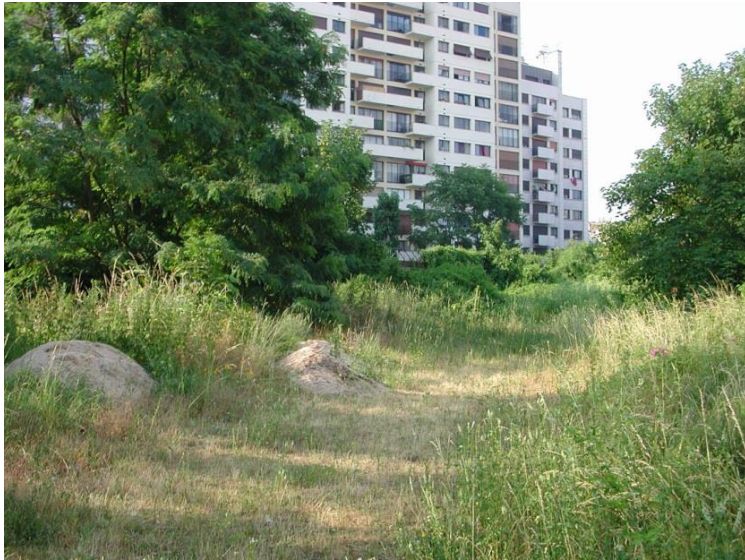
A rich green heritage

32% of Paris is composed of vegetation

- **530 gardens and parks = 454 hectares**
- **Two large Woods representing 2000 hectares**
- **600,000 trees in the city / 21% canopy surface**
- **127 hectares of green roofs and walls**



Surprising diversity of environments



And micro-environments



PANORAMA DE LA BIODIVERSITÉ À PARIS

À Paris, près de 2.800 espèces sauvages ont été observées entre 2010 et 2020 parmi lesquelles :

FLORE : 831 espèces

771

« PLANTES
À FLEURS »
(Angiospermes)

20

FOUGÈRES
ET PRÊLES

3

CONIFÈRES
(Gymnospermes)

37

MOUSSES ET
HÉPATIQUES

FONGE : 350 espèces

319

CHAMPIGNONS

31

LICHENS

FAUNE : 1.618 espèces

31

MAMMIFÈRES
DONT 10 ESPÈCES
DE CHAUVES-SOURIS

10

AMPHIBIENS
(grenouilles, crapauds,
tritons)



7

REPTILES

154

OISEAUX
DONT
60 ESPÈCES
NICHEUSES
À PARIS

32

POISSONS

INSECTES : 1132 espèces dont :



211

PAPILLONS
« DE NUIT »

48

PAPILLONS
« DE JOUR »



78

MOLLUSQUES
(limaces,
escargots,
moule d'eau
douce...)

109

ARACHNIDES
DONT 87 ESPÈCES
D'ARAIGNÉES



31

ORTHOPTÈRES
(criquets, grillons,
sauterelles, courtilières)



180

HYMÉNOPTÈRES
(guêpes, frelons,
abeilles, bourdons,
fourmis...)

9

MYRIAPODES
(iules,
scolopendres...)

42

ODONATES
(libellules, demoiselles)

281

COLÉOPTÈRES
(scarabées,
coccinelles...)

24

CRUSTACÉS
(écrevisses,
cloportes...)

32

AUTRES
INVERTÉBRÉS



The former railway belt : largest european colony of pipistrelle bat



Petite ceinture Paris 15 ©Philippe Jacob





Greening public spaces

20 % additional gardens and parks since 2001

New mandate pledge 2020 to 2026 :

- **100 hectares of neighbourhood greening spaces**
- **30 hectares of new gardens**

 **20% additional greening spaces by 2026**







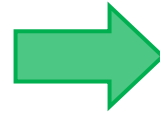




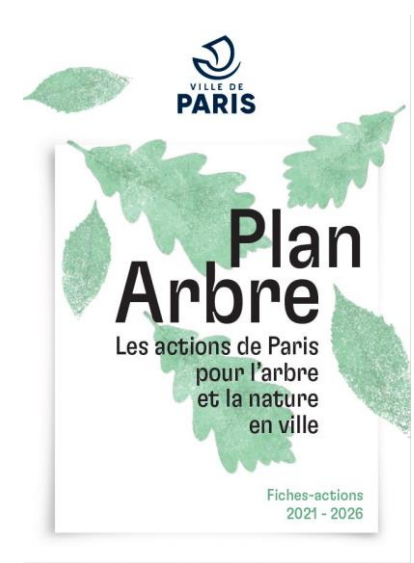
Planting trees

20 000 additional trees 2014 to 2020

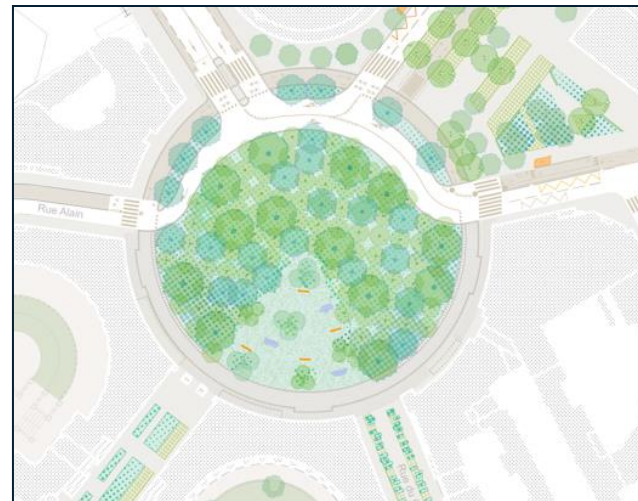
New mandate pledge 2020 to 2026



170 000 additional trees



Urban forests



Ecological management

**Banning chemical inputs :
Starting 2001
Completed in 2009**

**Differentiated
management**

Respecting nesting periods

Late mowing (twice a year)





Involving everyone



Parisculteurs

Reinventing Paris

150 Community gardens





PARLONS
PEU.



AGISSONS
CLIMAT !

L'ACADEMIE
DU CLIMAT

L'ACADEMIE
DU CLIMAT

L'ACADEMIE
DU CLIMAT

Involving everyone

Improving and sharing knowledge, thanks to scientists, associations and citizens

- Inventories
- Fields studies
- Participative sciences



Flora inventory in Vincennes wood



Counting butterflies in Père-Lachaise cemetery



Pupils discovering birds of Paris

Involving everyone

« Sparrow Neighborhoods »



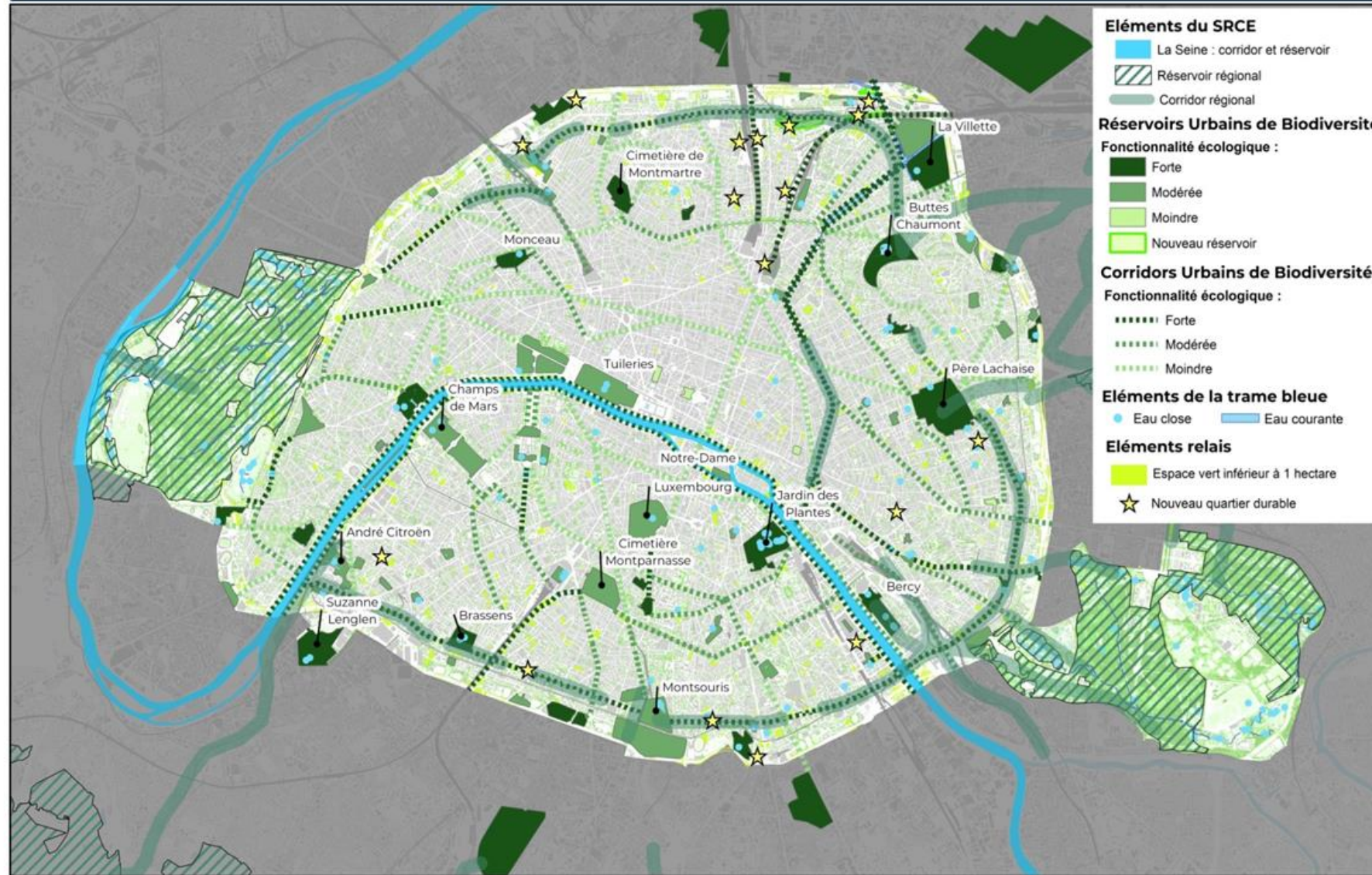


A new « bioclimatic » urban masterplan (2024)

Relying on ecological corridors / reservoirs

Protecting and promoting

- Trees
- Private green ground
- Green roofs and walls
- Permeabilization



The « BIODIVSCORE »

A tool for (auto)evaluation of Parisian urban projects

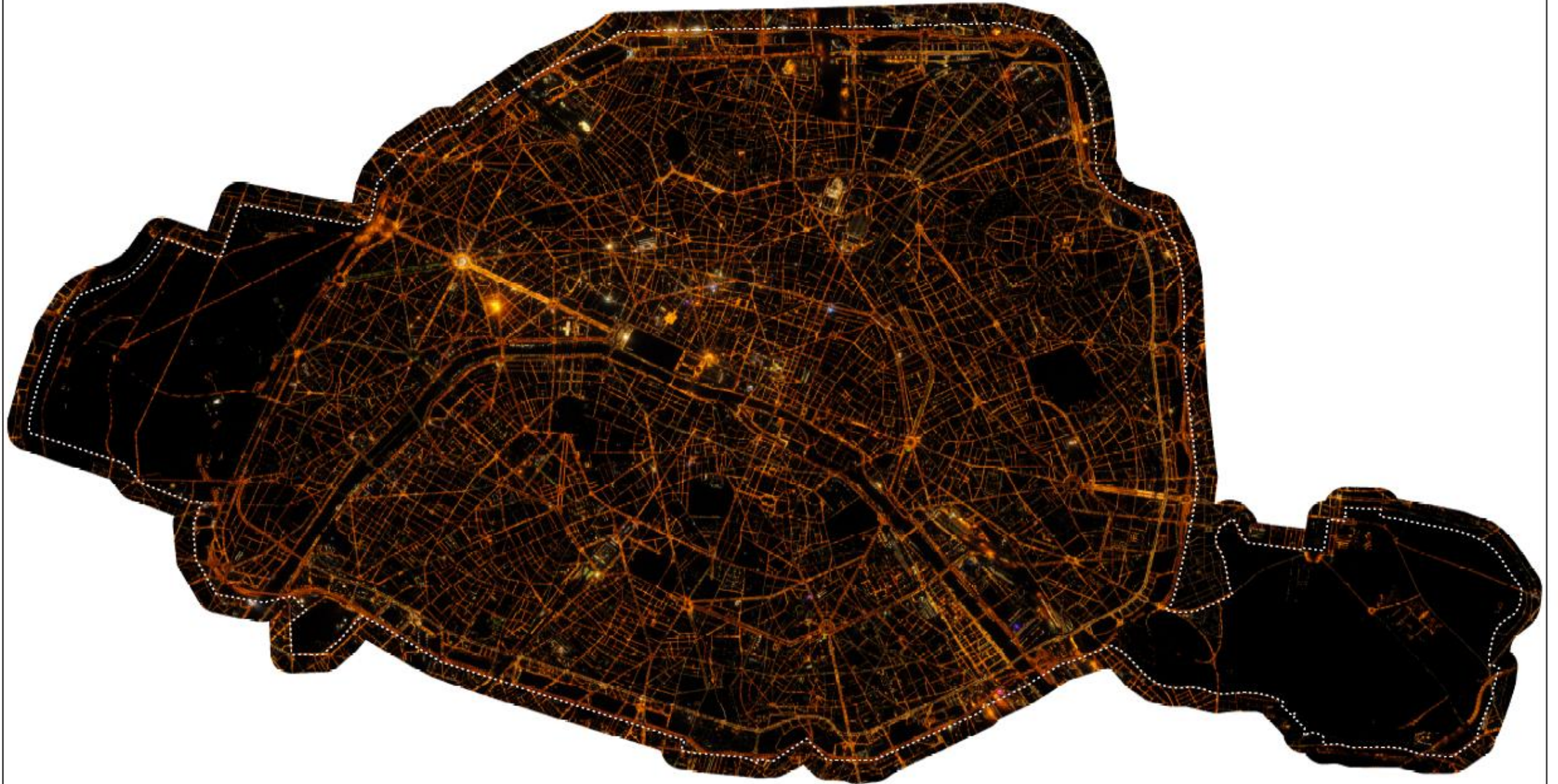
Designed for non ecologists / specialists

Initial state / Projected state / Offset measures

Provides a guide for solutions to improve buildings / land

Free and soon to be on-line





Anticipating climate change



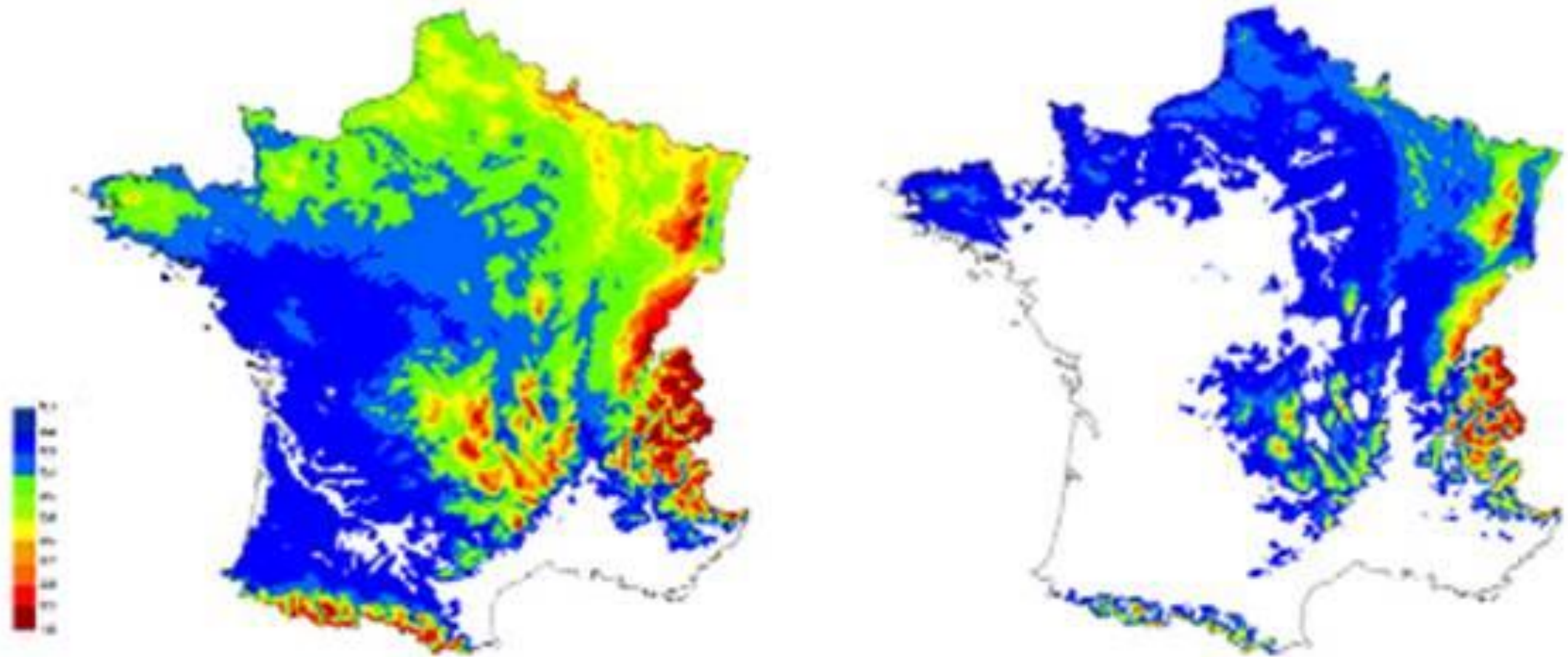
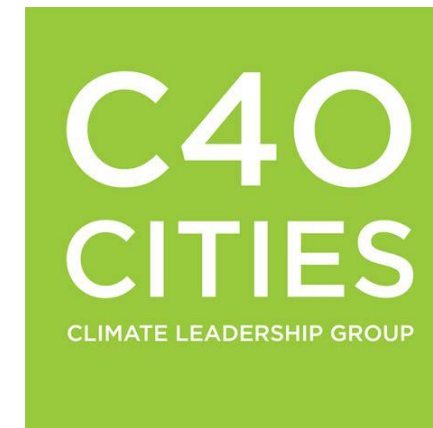


Figure 1. *Probabilité de présence du hêtre en France en 2000 (à gauche) et en 2100 (à droite) selon le scénario climatique Arpège B2 et le modèle de niche de Bodeau et al. (2009).*

Recognizing cities leadership for climate and nature action

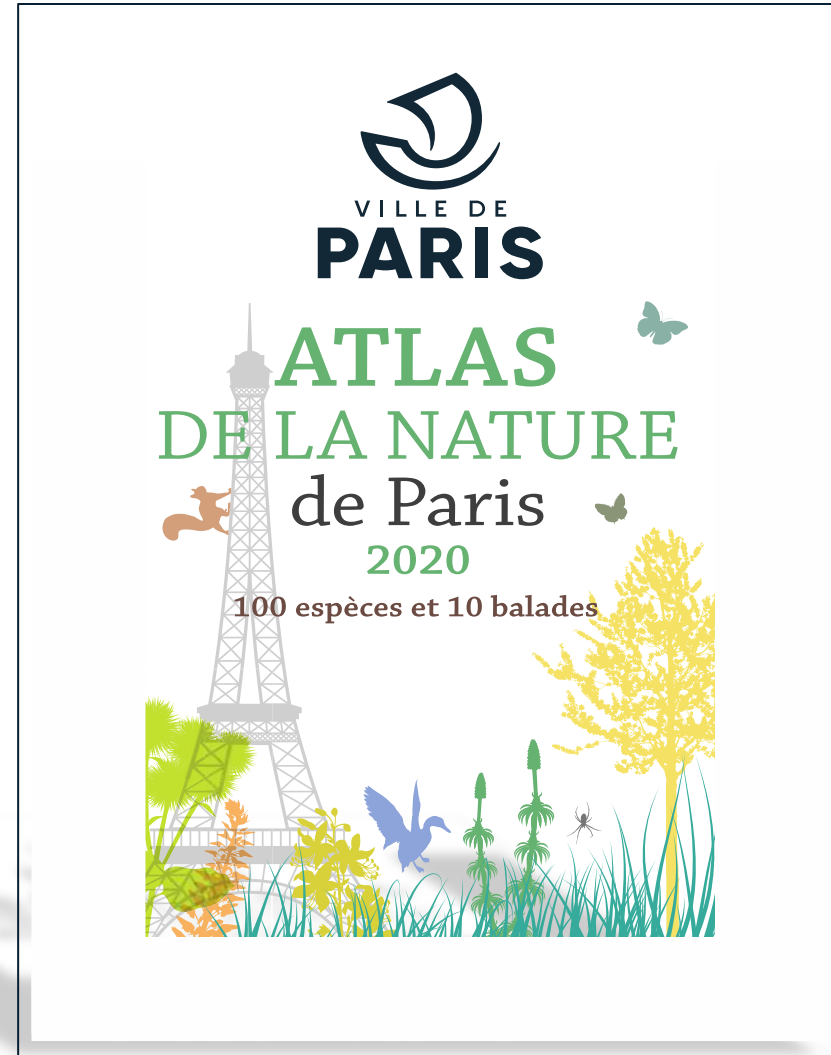


THANK YOU

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How do we know ?

- A dedicated team of ecologists and naturalists within the City
- A Biodiversity Observatory
- Links with academics and NGOs
- 2 Nature Atlas - 1st edition in 2007



An ambitious Biodiversity Plan

2nd Edition 2018 - 2024

Political steering committee

30 actions such as :

- Planting 50% of local native varieties
- Creating ponds and wetlands
- Ensuring animal welfare



25 Sustainable walks app

30 Podcasts



100 Guided tours catalogue



50 Conferences catalogue



30 On-line quizzes



20 Tutorials



8 Ambulant expositions



Posters



2 VR fauna movies



Changing the way we look at urban nature

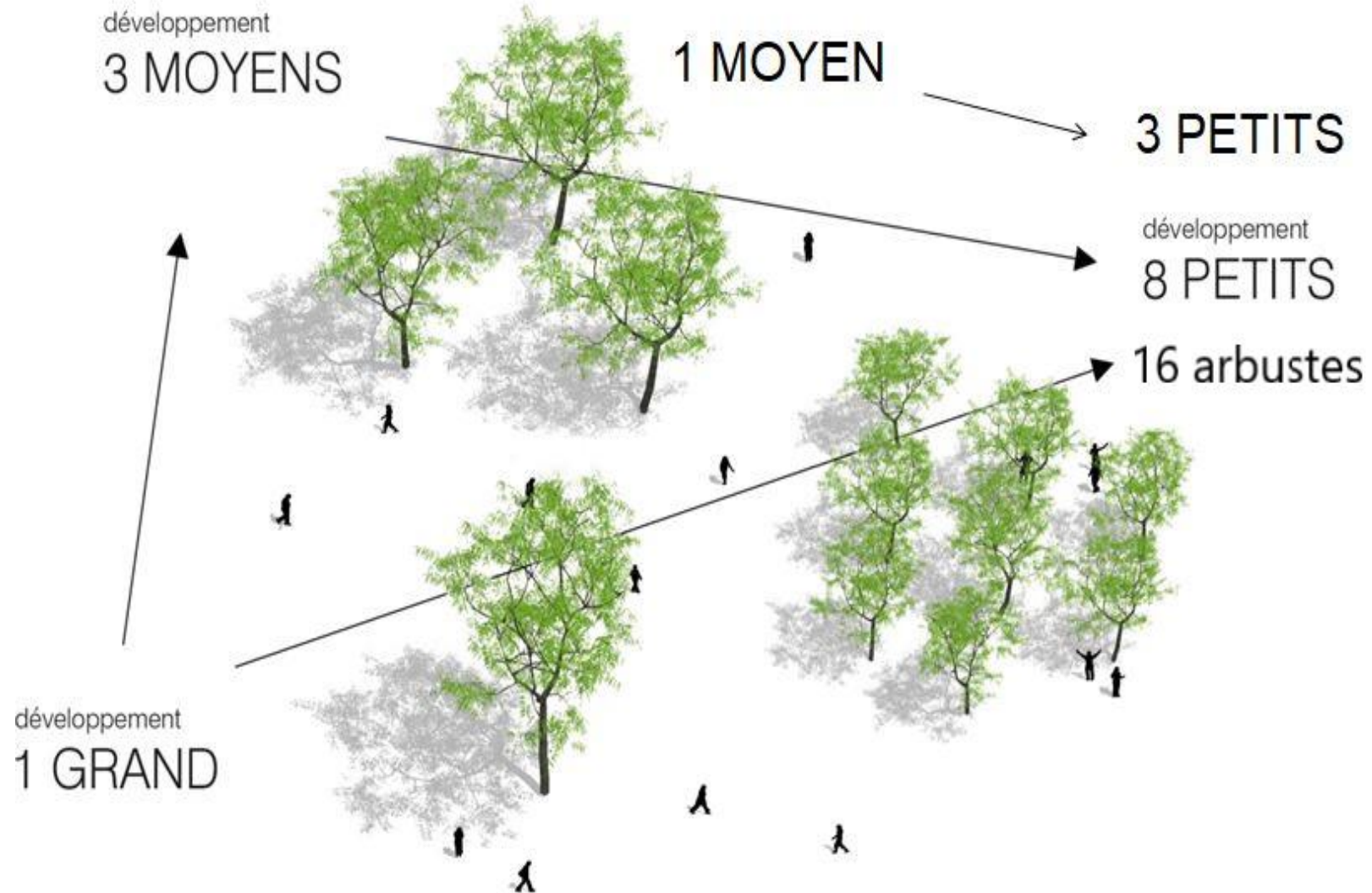


Jardin Folie Titon Paris 11^e © A



Pied d'arbre Paris20 © Yann Le Bourligu

Leaf volume equivalence for mandatory tree cutting



User competition

- Joggers / sports
- Dogs
- Kids playgrounds
- Walkers
- Sunbathing
- Events
- Biodiversity



6 bee families / 134 species 3 of which figure in the IUCN red list



Andrenidae (25)



Melittidae (2)



Apidae (24)



Halictidae (34)



Megachilidae (20)



Colletidae (14)



MUSÉUM
NATIONAL D'HISTOIRE NATURELLE

Protecting biodiversity

50+ protected areas

27 Bird Protection league (LPO) refuges

Hedgehog refuge

