



## Plant diversity under grid lines

Clémence Salvaudon – Conservatoire botanique national du Bassin parisien



RGI Workshop - 3<sup>rd</sup> October 2012

### 1. Introduction

- Current vegetation management under electric lines in forested areas creates an «open» environment, different from the adjacent forest and with undervalued floristic interest
- **A 3-year partnership between RTE Normandie-Paris / CBNBP / Ile-de-France Regional Council (2009-2011) :**
  - To realise an exhaustive plant inventory in grid corridors of the Ile-de-France region
  - To help the Regional Council for the creation of ecological corridors
  - To suggest vegetation management orientations for species conservation



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## 2. Methodology

- **Choice of corridors :**  
All corridors crossing natural and semi-natural environments of Ile-de-France region  
=> 330 km (900 ha)
- **Data collection :**
  - Exhaustive inventory of vascular plants by natural habitats (CORINE Biotopes)
  - Precise description of protected or endangered species populations
- **Data processing :**
  - Data entry into the CBNBP's database
  - Species characterisation by rarity and threat levels to evaluate the natural value of the species
  - Habitats and rares species localisation mapping with GIS

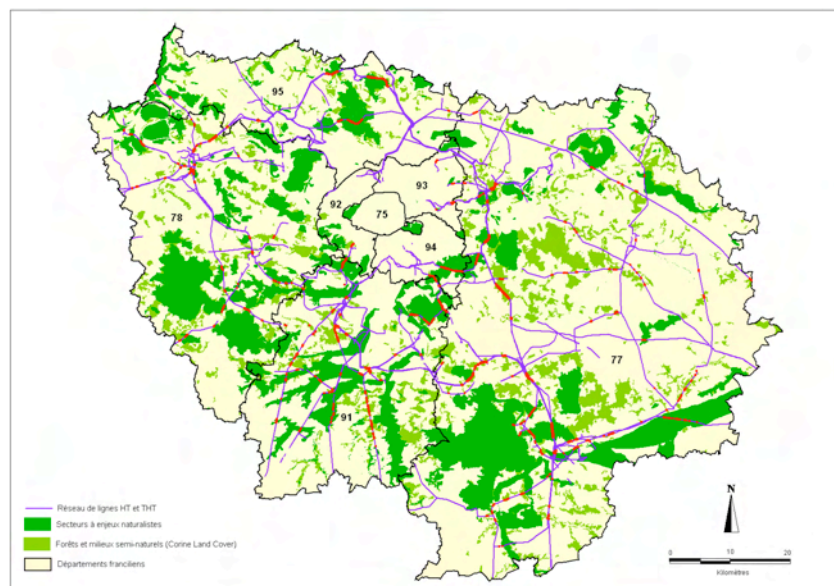


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## 2. Methodology

### Study Area



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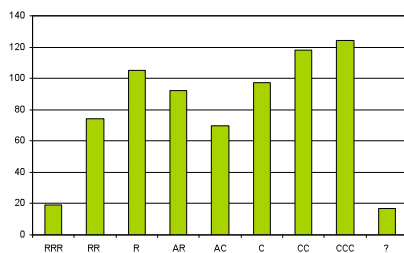


### 3. Results

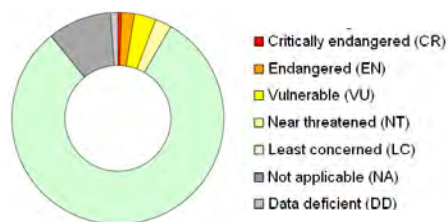
### Figures about Flora

- **716** plant species ie 47% of the regional flora
- **90%** native species
- **269** species with high rarity level (37%)
- **42** threatened species at regional scale : 4 Critically endangered, 13 Endangered and 25 Vulnerable (IUCN method)
- **20** protected species at regional or national scale

**Number of species by regional rarity levels**



**Species by regional threat categories**



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### 3. Results

### Examples of rare species found



***Dianthus superbus***  
(Large Pink)

- Wet meadows of the Seine valley
- Protected (France) and CR
- Only 3 stations in IDF



***Stipa pennata*** (Feather grass)

- Xeric grassland
- Protected (IDF) and EN
- Largest station of IDF



***Laserpitium latifolium***  
(Broad Leaved Sermountain)

- Sunny wood edges
- Protected (IDF) and EN



***Orobanche purpurea***  
(Yarrow boomrape)

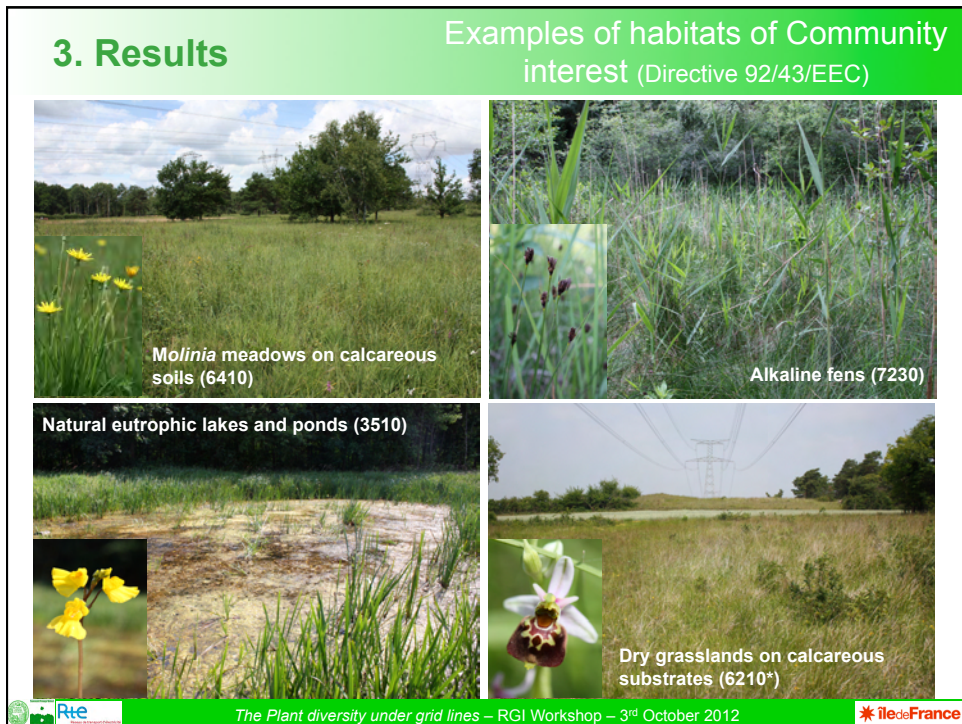
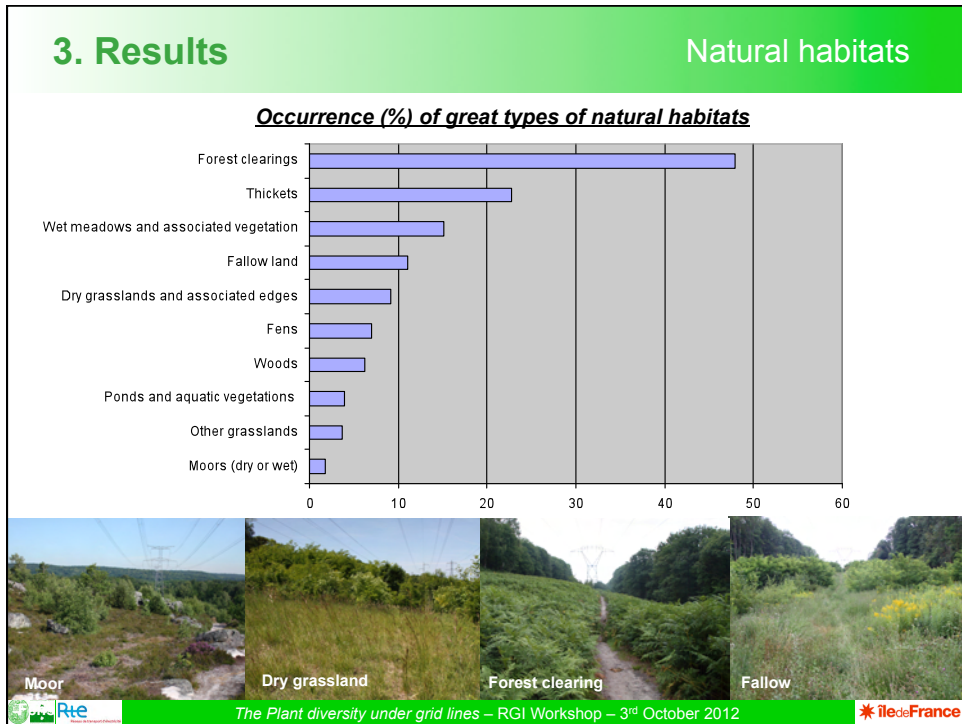
- Dry grassland on sandy soils
- Protected (IDF) and EN



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## 4. Vegetation management

### Current situation

#### A responsibility facing biodiversity :

- Natural habitats of high value, threatened in the region and the country
- Major value species in Ile-de-France

#### Positive aspects of the vegetation management but ...

- Biological cycles not taken into account in maintenance periods
- Dominance of woody plants : decrease in botanical interest
- No removing of the material resulting from clearing
- Invasive species proliferation such as *Robinia pseudoacacia* (False acacia), very numerous under electric lines



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## 4. Vegetation management

### Recommendations

- Recommendations for corridors with high value habitats and/or rare and endangered plant species
- Integration into RTE's GIS habitats mapping
- **Main recommendations :**
  - To prefer mowing rather than rotary cut
  - To adapt period according to the biological cycle of endangered species to enhance their population (ex : tardive mowing in dry grasslands in August)
  - To adapt frequency : 2-3 years rather than 4-5 years according to habitats
  - To remove material resulting from clearing out of the corridor



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## 5. Conclusion

- A vegetal biodiversity of higher interest than expected, even if most of plant species and natural habitats are very common
- Awareness for RTE of the richness of plant species under their lines
- First concrete actions :
  - Communication actions toward RTE's staff and public (articles, presentations, field trip)
  - Field marking for species threatened by next wood cut
  - Vegetation management experimentation in La Bassée Nature Reserve (LIFE Elia project)



**Thank you for your attention**

