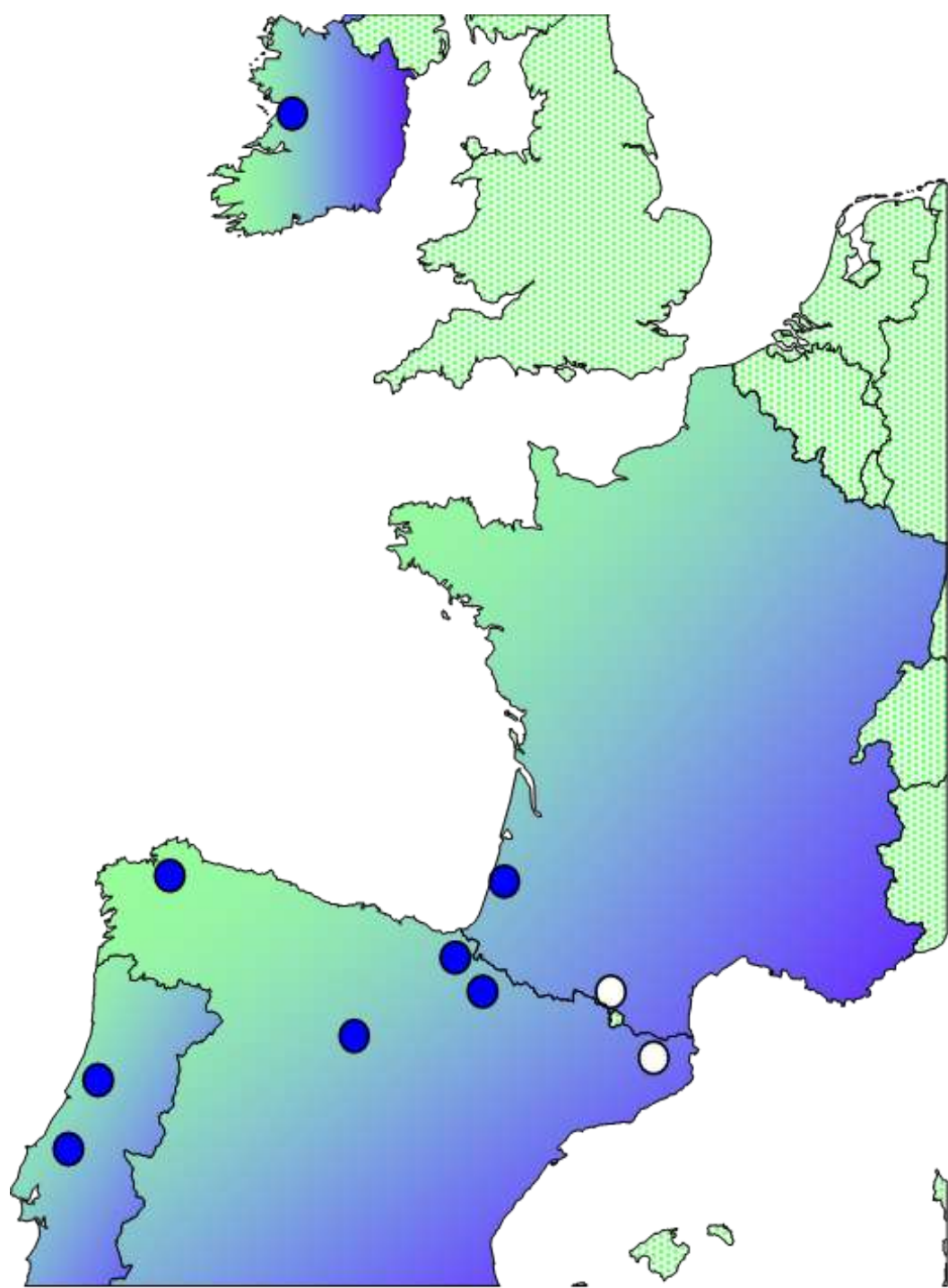


# Integrated approach for the evaluation of SFM indicators at local scales

## CONTEXT AND RATIONALE

Criteria and indicators of SFM have been defined in inter-ministerial process and this evaluation is required for national reporting and certification schemes.

In the context of European Atlantic Forests, with high production and small multifunctional ownership, evaluation of indicators at the regional level needed methodology expertise and development.



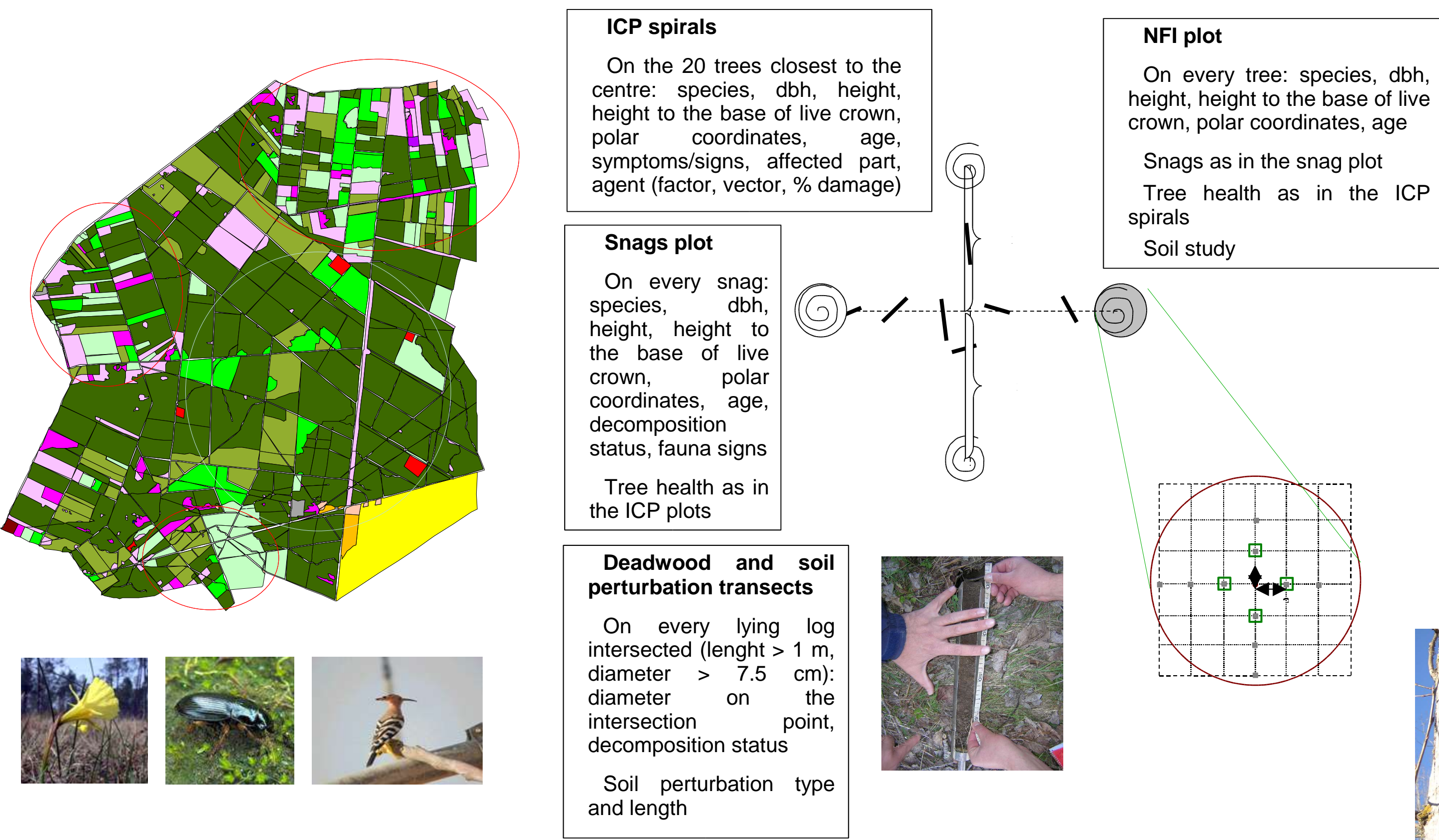
## OBJECTIVES AND METHOD

- THIS PROJECT AIMS ARE :
- 1.To improve : feasibility, relevance and cost of indicators evaluation.
  - 2.To explain and demonstrate the interest of indicators to forest owners, managers, and other regional institutions through regional events
  - 3.To provide scientific knowledge needed for sustainability.
- BY A THREE STEP PROCESS:
- selection of pilot zones and indicators by expert panels
  - elaboration of harmonised protocols and data collection
  - analysis of data, assessment of costs and dissemination

Pilot zone	Location	Tree species	Area (ha)	For est (%)	Elevati on (m)	Boundaries	Ownership	Regional Scientific Study
Ireland	Mayo	Sitka spruce, Lodgepole Pine	25000	10 %	20-100	administrative (county)	Farm Forestry	C1 : Carbone storage
Aquitaine	Pontenx	Maritime Pine	100000	83 %	0-50	watershed nested in administrative boundaries	90 % private forests	C4 : Biodiversity
Euskadi	rio Ibaizabal	Radiata pine	50000	65 %	100-600	watershed	Private forestry	C5 : Soil protection
Navarra	Roncesvalles	Beech, Oak	18000	73.5 %	600-1200	Municipalities	Public forest	C1 : Carbone storage
Castilla y Leon	Rio Carrion	Poplar, Corsican pine, Scots pine	18600	26 %	800-1000	Watershed nested in administrative boundaries	private forests in agricultural landscape	C2 : Forest health
Galicia	Guitirriz	Maritime pine, Eucalyptus globulus Radiata Pine, oak	45000	75 %	400-700	Municipalities	Private and community forests	C1 : Carbone storage
Northern Portugal	Sousa Valley	Maritime pine + eucalyptus	77000	38 %	100-600	Forest owner association in administrative boundaries	Small private forests	C6 : Socieconomics
Central Portugal	Pinhal Interior Norte	Eucalyptus globulus Maritime pine	272000	55 %	600-1200	Administrative zone (county)	Private forests in rural areas	C1 : Carbone storage

## PROJECT IMPLEMENTATION

- Concertation achieved in 2004
  - Common list of indicators to be tested
  - Scientific study of each region
  - Common protocols for indicators evaluation
- Pilot zone Mapping, Field Work, Statistic and survey collection in progress in 2005.
- Cost assessment procedure under definition
- Regional scientific Studies under completion.



## CONCLUSION

- At this stage many challenges have been solved :
- Screening a wild range of indicators by expert groups for relevance at the regional level
  - Set up of harmonized field protocols and survey for 9 regions
  - Partnership with institutional data providers established (NFI, National statistics, ...)
- Main Challenge ahead : demonstrate that the selected tools are relevant and cost efficient