



CNRS - GDR 3544 'Sciences du bois'



French Research Groupment on Wood Science

supported by French National Center for Scientific research (CNRS)

2012-2015 & 2016-2020

(march 2016)

Direction:

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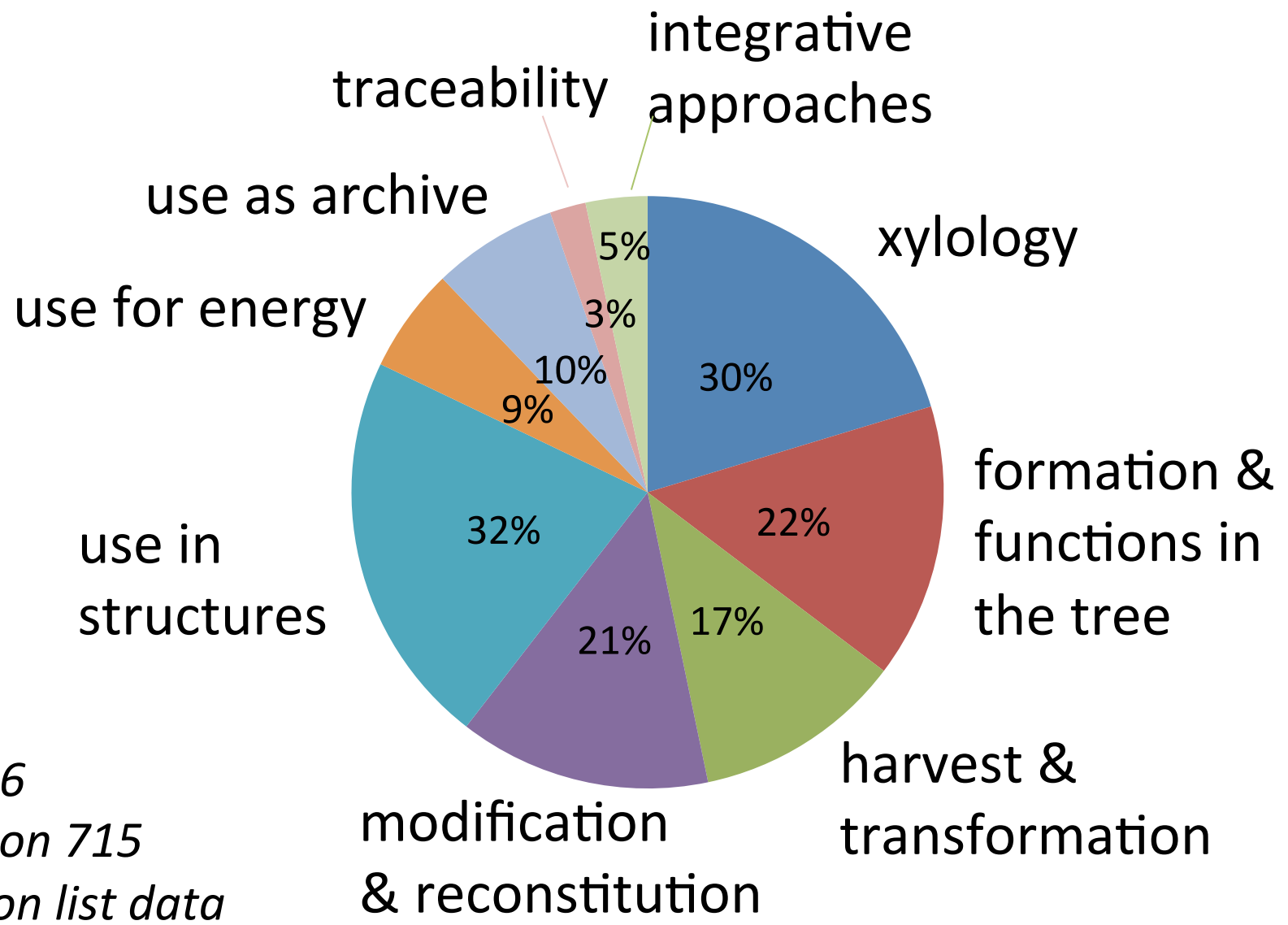
<http://www6.inra.fr/gdr-sciences-du-bois/>

Objectives

- Coordination of wood science in France
 - Improve communication between groups
 - Develop training at M & D level
 - Facilitate transfer of capacities
 - Identify issues and challenges
 - serve as relay to international networks
- *A scientific network centred on an object*
- constituent of the tree
 - Material of craftsmen and engineers
 - Archive of past events

	THEMES	DESCRIPTION
xy	Xylology	Multi-scale wood description, measurement of properties, modelling of structure-properties relationships
gf	Formation and functions in tree	genetic and environmental control of wood formation, in relation to functions in tree and ecosystem
rt	harvest & transformation	going from tree to industrial components through cutting operations and drying
mr	Modification reconstitution	volume or surface modifications, thermal or chemical, production of wood-based products
us	Uses in structures	for optimal use of wood in construction, civil engineering, packaging, mechanical construction including cultural objects
ue	Uses for energy	of wood and wood-based wastes, impact of resource quality and environmental consequences
ua	Uses as archive	wood as marker of history , pre-history or paleo-history, of cultures, of relations between man and natural resources...
ta	Traceability, adequacy resource/uses	making use of wood diversity, certification and identification through the whole chain using data and knowledge bases
ai	Integrative approaches	multidisciplinary life cycle analysis and environmental assessments of the whole wood chain based on models and data, distribution and dynamic of wood resource.

Research themes



*1/2016
based on 715
diffusion list data*

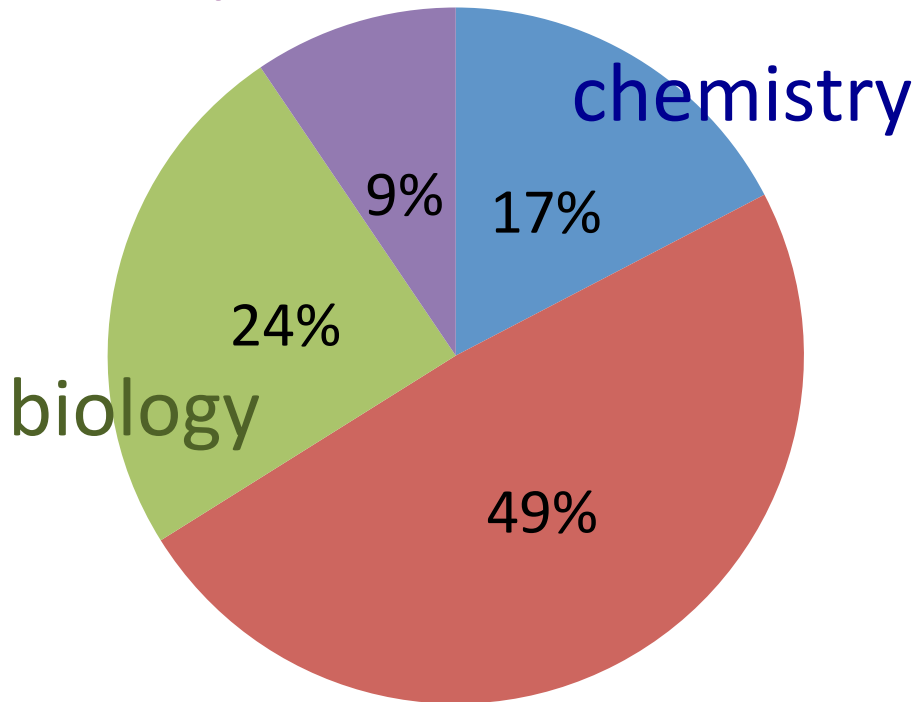
Disciplines

humanities

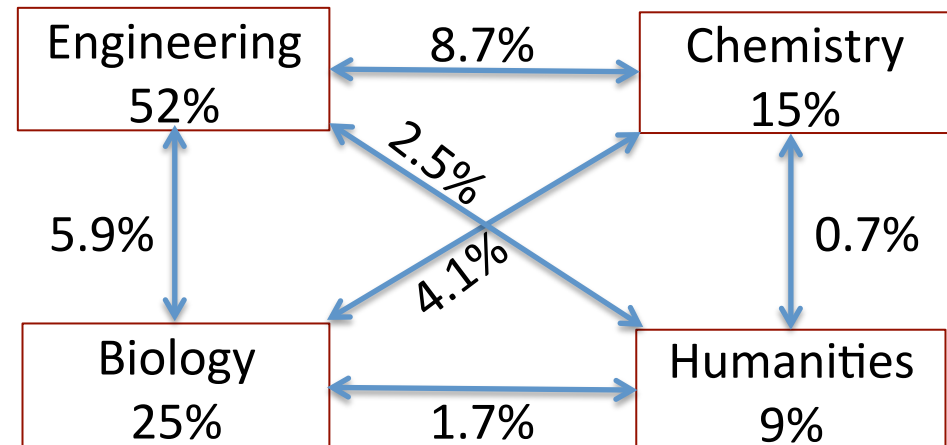
[+ paleo-, archeo-]

1/2016

based on 715 data



engineering
[+physics]

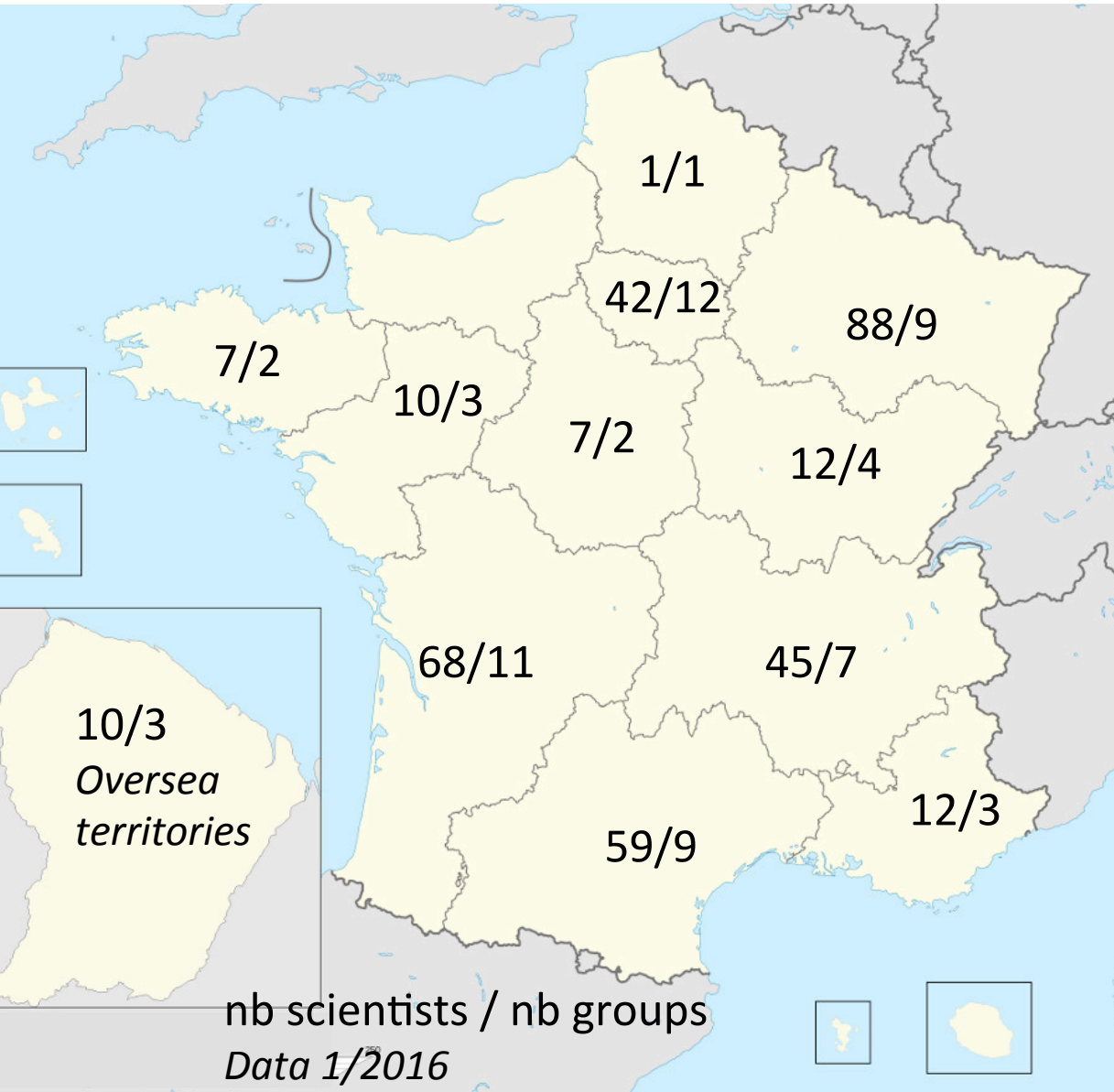


... and inter-disciplinarity



'Strict' participation to GDR3544

Research staff from French labs, **formally registered** in the Groupment



135 members of 26 CNRS units

- **INSIS** (9 labs) - engineering
- **INEE** (7) - ecology, environment
- **INC** (6) - chemistry
- **INSHS** (3) - humanities

243 members of 31 other units

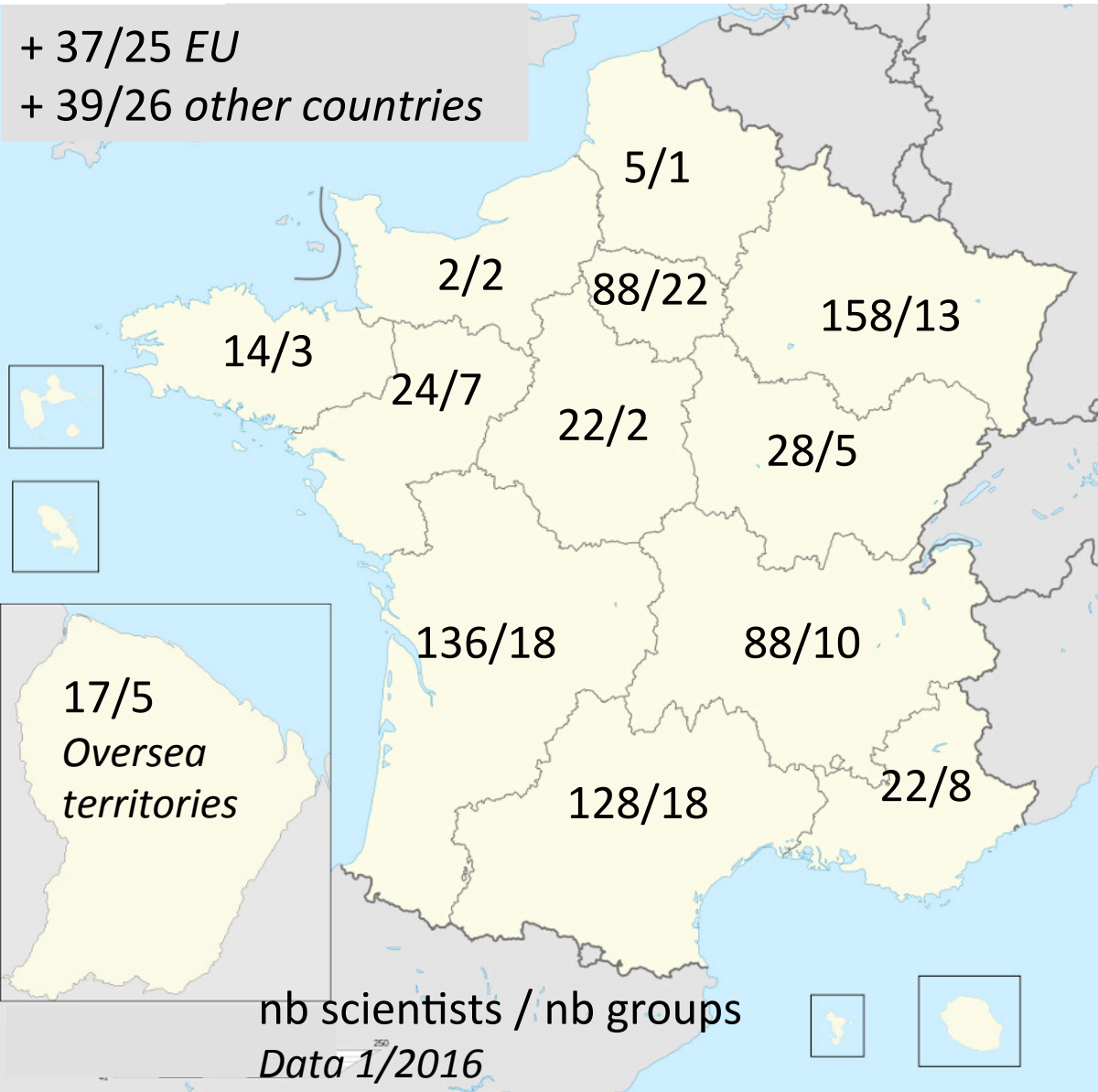
- INRA-APT (10 labs): agro
- CIRAD (4): tropical agro
- University only (5): Lermab...
- Engineering schools (4): ESBA...
- Culture (4): LRMH, INRAP...
- Industrial research (2): FCBA...
-

Data 2/2015



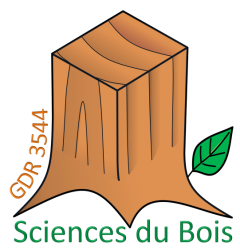
'Broad' participation to GDR3544

Members of the diffusion list, incl. students, technical staff, 'for info' ...



In 2015:

- 730 scientists in 100 groups + 75 abroad
- 40% in 9 groups of 20+ (LERMaB, BioWooEB, FCBA, PIAF, I2M, LERFoB, Pascal, AGPF, LMGC)
- ½ groups of 1-2



The largest French groups involved in wood science

- 69% of research staff in 20 units
- significant number of small groups or “isolated” wood scientists

data 01/2016

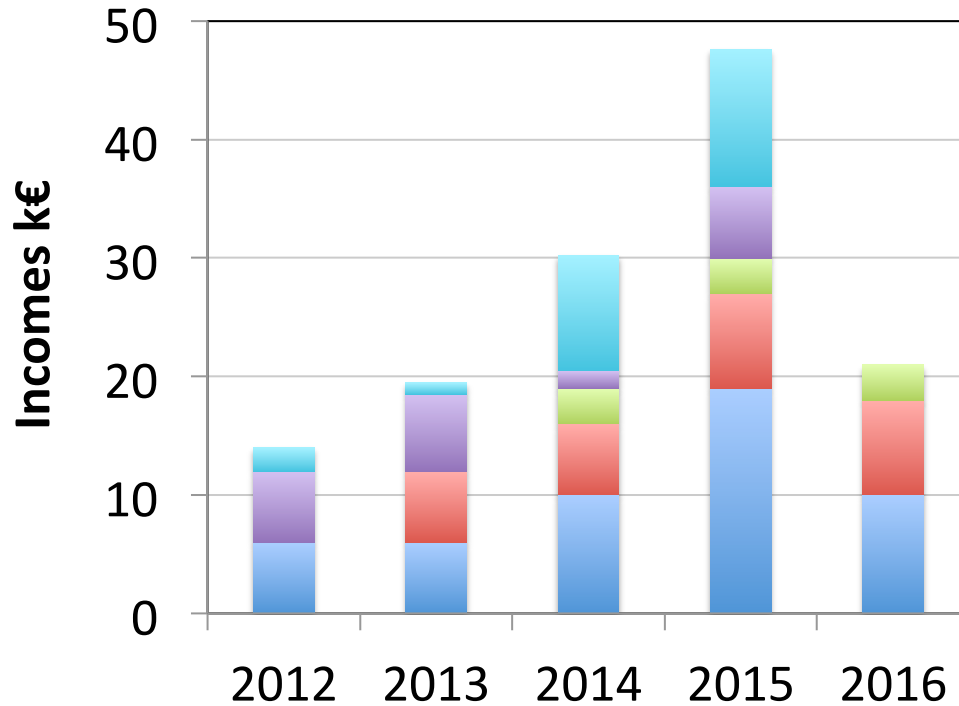
Lab	city	staff	all incld
Lermab	Nancy	47	72
Biowoob	Montpellier	24	41
I2M	Bordeaux	12	35
FCBA	Bordeaux, etc.	31	34
Piaf	Clermont-Fd	20	33
Lerfob	Nancy	14	31
Inst. Pascal	Clermont-Fd	8	28
LMGC	Montpellier	10	20
EEF	Nancy	7	18
LGPM	Paris	9	18
Amap	Montpellier	12	17
GEMH	Limoges	8	17
AGPF	Orléans	6	17
Navier	Paris	3	16
LCSN	Limoges	3	15
Agap	Montpellier	8	14
ESB	Nantes	8	14
Labomap	Cluny	7	13
LCPO	Bordeaux	7	12
Ecofog	F. Guyana	7	11
...
	total France	366	734
	ratio	69%	65%

Main activities

- Annual meetings
 - Montpellier, 26-28/11/2012 (180 participants)
 - Champs-sur-Marne (Paris), 19-21/11/2013 (160)
 - Nancy, 12-14/11/2014 (200)
 - Clermont 4-6/11/2015 (160)
 - Bordeaux 8-10/11/2016
 - Thematic meetings
 - Wood imaging, Paris 11-12/5/2016 (50)
 - Meetings between scientists and professionals, *to be organised*
 - Support to meetings organised by members (e.g., Innovawood)
 - Training schools
 - ESB Nantes 2-4/6/2014, 30/5-3/6/2016: beginners' summer school (10-15)
 - CNRS Thematic school 5/2015 "PLURIBOIS Woods and their uses, pluridisciplinary approach of diversity" Egletons [*next in 2017, Mt de Marsan*] (40)
- *Communication mostly in French (little overlap with other networks & activities)*
- Support to mobility
 - Grants for 'short-term scientific missions' within France



BUGDET OF GDR 3544 (k€)



- Local+assoc
- LabEx
- INRA
- MCC
- CNRS



- **Spendings in 2015**

- 19k€ for the Annual Meeting
- 2.5 k€ for individual mobility support
- 3k€ other expenses

+ 16.5k€ for the CNRS thematic school (full cost, incl on-site lodging)

→ ~ 30k€ / year
for regular activities

Conclusion & perspectives

- This national network responds to a demand by French scientists involved in wood science to be identified as such
- Compared to past networks, it evolved from the paradigm of forest-wood chain to that of a shared scientific object, observed not only by foresters and engineers but also by environmentalists, historians, archaeologists...
- Presently focused on national networking, with communication mostly in French, but with prospect of progressive opening to international connexions
- More interactions with professional sectors?
- May evolve into a Society after 2020