

Using economic tools for managing ecosystems: a management approach

Laurent Mermet

AgroParisTech

<http://laurent-mermet.fr/>

It takes more than ecology; it takes more than economics...

- Trained as an ecologist...
- ... but is our management of ecosystems up to our knowledge about them?
- What is missing for good management of ecosystems:
Economics? Law? Politics? Sociology?
Culture? Psychology? ...?

A management perspective on managing ecosystems (1)

- How about treating management of ecosystems as a... Management issue?
- The essence of management:
« The analysis and design of mechanisms through which we conduct organized action » (Hatchuel)
- Drawing on the resources from management
 - Strategy
 - Accounting

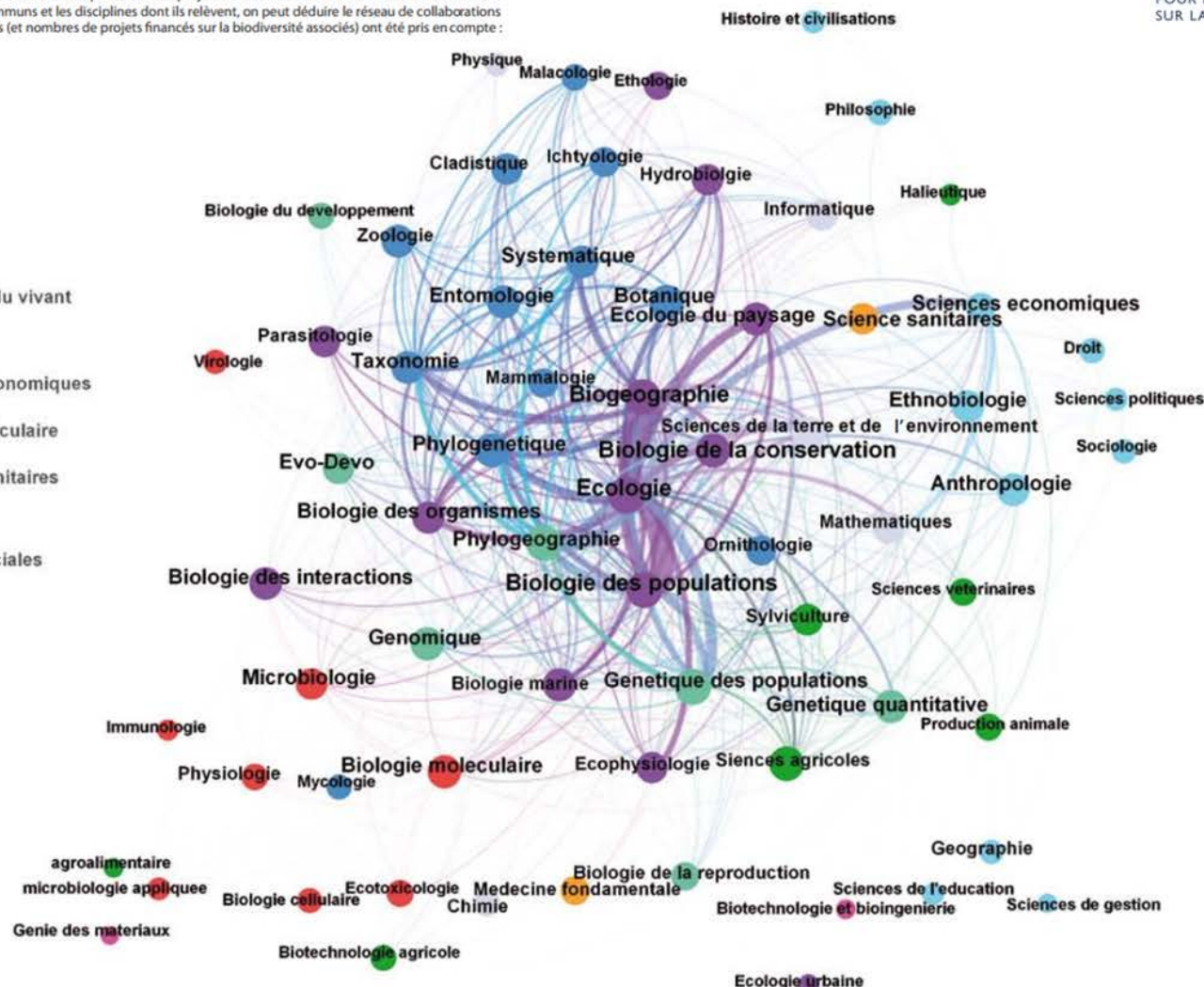
La recherche sur la biodiversité en France

Réseau de collaborations entre disciplines

Les acteurs de la base de données FRB sont associés à des disciplines et à des projets de recherche sur la biodiversité. En considérant les chercheurs qui participent à des projets communs et les disciplines dont ils relèvent, on peut déduire le réseau de collaborations entre les disciplines. Les appels d'offres suivants (et nombres de projets financés sur la biodiversité associés) ont été pris en compte :

ANR-6extinction-2009 (12)
ANR-biodiv-2005 (15)
ANR-biodiv-2006 (15)
ANR-biodiv-2007 (16)
BRG-RG-2005 (30)
BRG-RG-2007 (19)
FRB-CESAB-2010 (4)
FRB-innov-2009 (53)
FRB-scenario-2010 (4)
IFB-OcéanIndien-2007 (17)

- Ecologie
- Classes et classification du vivant
- Génétique et évolution
- Sciences agricoles et agronomiques
- Biologie cellulaire et moléculaire
- Sciences médicales et sanitaires
- Sciences exactes
- Sciences humaines et sociales
- Sciences de l'ingénieur et technologiques



A management perspective... (2)

- As a discipline: massively under-represented in the biodiversity & ecosystems literature
- A need for new developments in the context of managing ecological systems
- A capacity to draw on resources from other disciplines in a performance-centred perspective
- A potential for linking up with private and public sector organisations' management
- One theme here: the connection between a management tool and overall management effectiveness

« Tools for What Trade? »

- Treating ESV & economic tools as management tools
- <http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/RECHERCHE/Scientifiques/A-savoir/25-VA-A-Savoir.pdf>
- What place and role in real world organised action about ecosystems?
- A review on utilization of ESV, PES, buying & easements, biodiversity banking (chap. 1-4)
- A reflection on the limits of how we currently approach utilization issues (chap 5)
- A set of resources for deeper understanding of utilization issues (chap 6-10)

Ecosystem services: the need for a managerial detour

- There is no direct link between the production of knowledge on ES and the expected change in the way the management of ecosystems is actually organized
- To create change, one has to take a *detour* and analyse the organizing processes within which ES knowledge & economic tools are going to be utilized
- What guide can we use to make sure the detour effectively gets us to utilization and change?

The three most beaten tracks

- Insist on **reasoning rationally...**
 - ... it should help, however (and by whomever) decisions may be taken
- Taking institutions and organisations **as they are...**
 - ... and press for adoption of economic tools
- Adopt innovative = **participatory approaches...**
 - ... expecting a better chance of adoption
 - ... and connecting with dominant current approaches to ecosystem management

Who decides? Who manages?

- **We** must manage ecosystem services better. Right. Who is **we**?
- Five paradigms of organized action
 - Government (decision support tool)
 - Coordination (negociation tool)
 - Revolution (a counter productive tool)
 - Governance (a tool for participatory procedures)
 - Minority intervention for change (a tool for advocacy)

Four theories for examining crucial issues

- Ostrom's **Commons-pool resources theory**
Embeds tool-based intervention in negotiated rule-making
- Boltanski & Thévenot's **Justification theory**
Clarifies and helps navigate the ethical challenges that besiege biodiversity economics
- Callon & Latour's **Actor-network theory**
Help follow how tools effect change if they succeed in affecting knowledge, practice & social relations enough to drop previous dysfonctionnal connections
- **Strategic Environmental Management Analysis**
Focuses on the power relations involved in change
Embeds tool-based intervention in well-considered strategies for advocacy and defense/promotion of ecosystem concerns

http://www.iddri.org/Publications/Collections/Idees-pour-le-debat/ID_1105_mermet_SEMA.pdf

A problem for practice, or for theory?

- Improving the questions we ask ourselves (and balance that with promotion of standard solutions)
- Intellectual tools for cases when in-depth diagnostic & strategic reflections are necessary
- « *I know it works in practice...* »
- « In the same way as many plants only bear fruit when they do not shoot too high, so in practical arts the theoretical leaves and flowers must not be made to sprout too far, but kept near to experience, which is their natural ground » (Clausewitz, *On war*, Preface)