



Les Jeudis de l'UMR

JEUDI 05 JANVIER 2023 / 13H15 **Cédric GAUCHEREL**, INRAE UMR AMAP, Montpellier

The (social-)ecological service bundle and its dynamics

Monitoring the provision of multiple ecosystem services (ES) in social-ecological systems is a major challenge. Most tools usually tackle the problem by modelling individual ES, but do not perform a holistic analysis and modelling of a dynamic and integrated system. My team develops a possibilistic framework (called EDEN, Gaucherel and Pommereau 2019) and explored its potential for assessing multifunctionality and the service bundle of several sites in France (a ski station, Chamrousse (Mao et al. 2021), the Camargue and a high elevation pasture) as well as in Africa. We represent each social-ecological system as an interaction network made up of components and processes of various natures. We list economy and ecology-related ES, depending on the presence/absence of these components. We then model all possible trajectories of the system under contrasted economic, environmental and climatic conditions and compute the whole service bundle and its changes. Results of EDEN's models directly show the bundle dynamics and guides recommendations for each site.

References

Gaucherel, C. and F. Pommereau. 2019. Using discrete systems to exhaustively characterize the dynamics of an integrated ecosystem. *Methods in Ecology and Evolution* 00:1–13.

Mao, Z., J. Centanni, F. Pommereau, A. Stokes, and C. Gaucherel. 2021. Maintaining biodiversity promotes the multifunctionality of social-ecological systems: Holistic modelling of a mountain system. *Ecosystem services* 47:101220.

> accès zoom

<https://umontpellier-fr.zoom.us/j/96426860643>
ID de réunion : 964 2686 0643

> prochainement



Jeudi 12 janvier 2023 : Jean-Marc Fromentin
“Main outcomes of the IPBES assessment on the sustainable use of wild species”
(Directeur adjoint de l'UMR MARBEC, Sète)

@ contacts

myriam.callier@ifremer.fr
sylvie.lapegue@ifremer.fr
celine.reisser@ifremer.fr
angelique.gobet@ifremer.fr
remy.canet@ifremer.fr
paul.estoup@univ-amu.fr

+ programme & archives

Programme des Jeudis et archives des 8 dernières présentations disponibles sur :
<https://umr-marbec.fr/category/seminaires-marbec/>



INRAE

UMR MARBEC (IRD, Ifremer, Université de Montpellier, CNRS, INRAE)
Tél. 04 67 14 36 72 / 04 67 13 04 24
www.umr-marbec.fr