

BIODIVERSA IMAGINE Project –

Integrative Management of Green Infrastructures Multifunctionality, Ecosystem integrity and Ecosystem Services:

From assessment to regulation in socio-ecological systems

We are looking for a suitable candidate to work on conservation and connectivity issues in relation to ecosystem services on a 14 months contract.

The distribution of ecosystem sites and the connectivity of the intermediate landscape across a region are key links between ecology and society. On the one hand, pattern characteristics determine the regional sustainability for biodiversity; on the other hand they are subject to human interventions.

We aim to:

- ➤ Provide an integrated and novel modeling and analytical framework in order to guide conservation efforts oriented to improve landscape connectivity at different spatial scales.
- ➤ We aim to gain insights into the inherent assumptions, uncertainties and potential differences among existing approaches and their practical consequences for decision making.
- ➤ The spatial tools will serve to support integrative planning at territorial level to incorporate the best use of related ecosystem services, a testing ground will a region in the South of France known as "Etang de Thau" (or **Bassin de Thau**)

The research work will be within the framework of the European IMAGINE BIODIVERSA project coordinated by Irstea, France. We are looking for a candidate that will develop methods to identify critical habitat patches and critical distances across scales based on multi-scale species-habitat relationships. Flexible tools will enable policymakers, planners, and interested laymen to explore the range of 'sustainable spatial solutions' for combining the development of a cohesive ecosystem network with other infrastructural and land use demands.

The candidate will have the opportunity to exchange with other EU partners involved in the project, which includes specialists in data analysis, ecological modelling, environmental

economists and researchers that collected and/or organized the ecological datasets. This position will be based in Montpellier, France, in a research team specialized in spatial analysis and spatial modelling (Integrated Unit TETIS) https://www.teledetection.fr/, with the possibility to participate in exchange with other partners and stakeholders in Europe.

The candidate needs to have the ability to work in interdisciplinary environments having excellent English proficiency skills, knowledge in French will be a bonus.

- Master in eco-informatics, computational ecology, geography or equivalent with strong background on Spatial Information Systems
- skills in statistical modelling, remote sensing and programming will be much appreciated
- Experience/training: spatial analysis and geomatics
- Solid interest for ecology, macro-ecology, landscape ecology
- High proficiency in R will be much appreciated
- Excellent communication and writing skills

To apply: send your CV and letter of motivation before <u>January 10</u>, via electronic mail to:

Sandra.luque@irstea.fr & maxime.lenormand@irstea.fr

Note: only shortlisted selected candidates will be contacted for an interview.