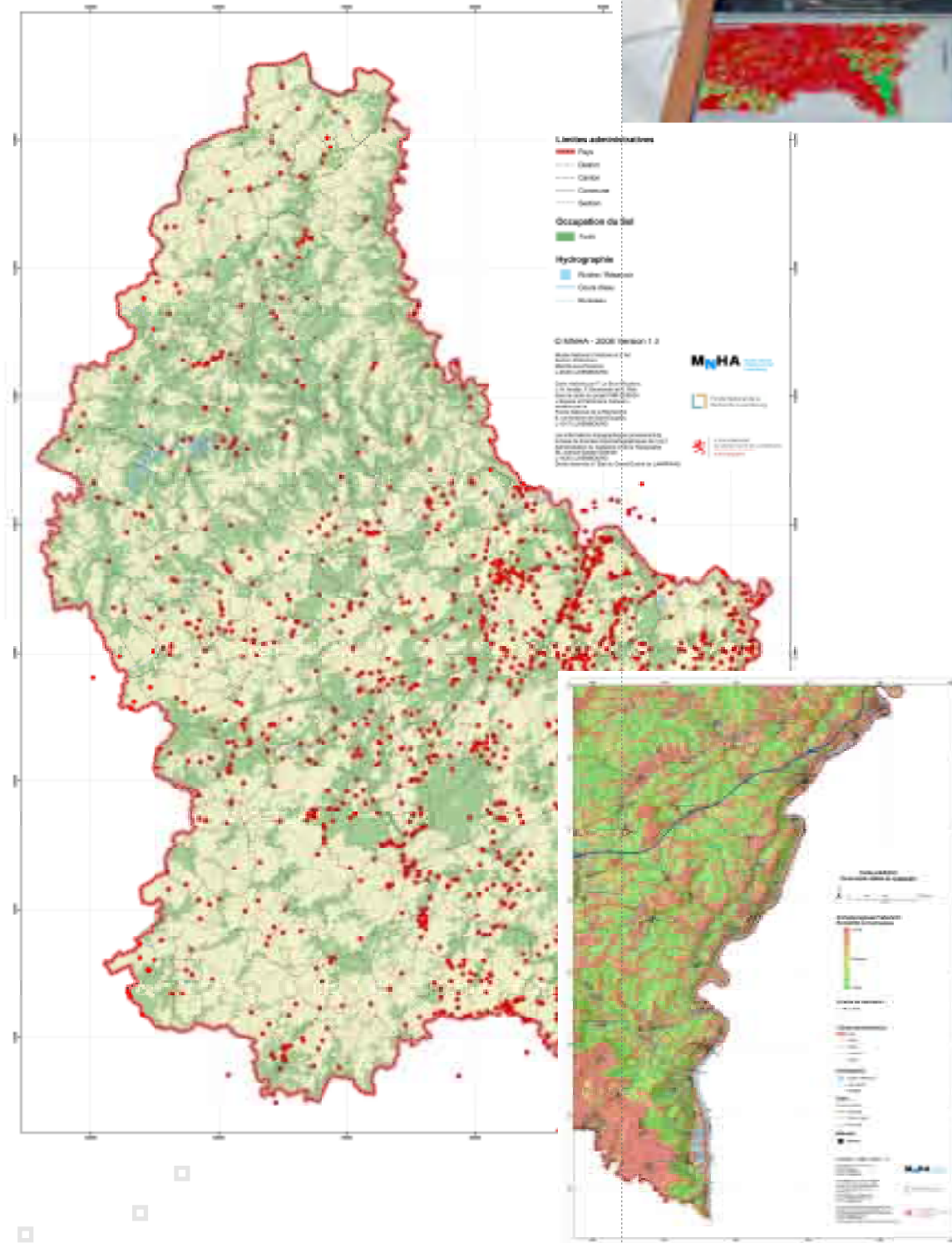


## SUCCESS STORIES

### ESPACE ET PATRIMOINE CULTUREL (EPC): THE CREATION OF A TOOL TO HELP IN THE PROTECTION OF OUR CULTURAL HERITAGE

Throughout history, the Grand-Duchy of Luxembourg has been situated at a cross-road of cultural movements; as a consequence our country holds a particularly rich historical heritage. But whereas architectural sites can be easily identified, archaeological relics in our subsoil are invisible to the naked eye. According to statistics of the Ministry of Culture, over a third of this archaeological patrimony could be irremediably lost within the next 5 decades, if spatial development proceeds as to date. "It is close to impossible to keep up with all the building work" says Foni Le Brun-Ricalens of the National Museum of History and Art. "Time and again, building works have to be interrupted in the middle of proceedings, in order to undertake archaeological rescue digs. The resulting economical losses that both government and contractors incur could be prevented. Rather than stepping in when building is already under way, we need to be able to tackle the problem before authorisations have been granted. In order to achieve this, we need a tool that can help in the decision-making process."

In 2003, with the support of the FNR and the National Museum of History and Art, Foni Le Brun-Ricalens, Susanne Rick, Jean-Noël Anslin and Frank Broniewski started the gargantuan task of creating just such a tool; the EPC-project (Espace et Patrimoine Culturel) was born. The EPC-tool was to be an open-source, web-based application, accessible for administrations and building contractors, as well as the general public (although this is still in progress). It was to be a database coupled to a geo-referenced information system; a management tool helping to protect and raise awareness of the Grand-Duchy's cultural heritage, be it built or buried.



Cooperation with a host of public and private bodies was essential (Administration du Cadastre et de la Topographie, Service des Sites et Monuments Nationaux, Musée national d'histoire naturelle, Administration des Eaux et Forêts, Ponts et Chaussées: Service de Géologie, Direction de l'Aménagement du Territoire et de l'Urbanism... to name but a few); maps and other data needed to be collected for the initial setup. In the next step, the most relevant existing archaeological records (around 3,000 sites) were analysed. For a range of historical periods, data such as geology, topographical features, inclination or proximity to water points were compared in order to determine common denominators. By extrapolation, a country-wide map of archaeological potentials was created; archaeologically sensitive areas are marked in shades of red, non-sensitive areas are green. The so-called archæoprognose maps are supplied by the National Museum of History and Art or can be printed out directly via the internet.

But Foni Le Brun-Ricalens and his interdisciplinary team set themselves an even higher target: in addition to creating an administrative tool, they wanted to add a scientific side to it as well, this being a truly novel idea. All the data used for evaluation and statistical calculations is linked to the geographical information system; every single artefact has been described in detail and has been drawn in at centimetre scale: the possibilities for analysis are endless. New data is added continuously and is used to refine the potentiality model even further.

"You have to be passionate about a project like this one" says Foni Le Brun-Ricalens. "The beauty of a scientific and human adventure such as the one the four of us have embarked upon is to start with a truly aspiring project, and then see it achieved."

The EPC-project has certainly been successful. There are discussions to introduce parts of the EPC methodology (Archæoprognose) within archeological resource management projects under development in Belgium. Furthermore, the EPC-team members have been invited to present their work this year at the 37<sup>th</sup> annual Computer Applications and Quantitative Methods in Archaeology (CAA) conference, "Making History Interactive", in the USA.