

The Royal Belgium Institute of Natural Sciences is one of the major Belgian research centers dedicated to research and public education in the field of natural sciences. Its workforce numbers 450 including 150 scientists active in the fields of prehistorical anthropology, paleontology, zoology, geology, conservation biology and hydrology.

In line with its public mission, the Institute is increasingly involved in the use of information technologies. It has acquired experience in web based open source technologies using Zope, an open source application server, and Plone a content management system. Through these projects, the Institute has become an active contributor to the Zope and Plone user groups. The Institute is currently member of the Plone Foundation. This document describes the key current projects.

### **- *The Institute website.***

The Royal Belgium Institute of Natural Sciences website provides information about exhibitions, educational activities and research programs. In 2000, after analysis of different alternatives, the decision was taken to move to an open source framework. The main criteria of choice were: the programming language performance (Python), the maturity of the framework and the support available from the Zope community. Since then, the Institute web infrastructure is based on Zope and coupled with an intranet service.

In 2004, an effort was made to redesign the structure of the website. It was the opportunity to migrate from a purely Zope to a Plone framework, giving the Institute a new and powerful Content Management System adding new functionalities and increased effectiveness. The new website is scheduled for release in Summer 2005.

[www.naturalsciences.be](http://www.naturalsciences.be)

### **- *The MARS project* standing for **Multimedia Archaeological Research System.****

MARS is a research action funded by the Belgian Science Policy Office ([www.belspo.be](http://www.belspo.be)). Three Belgian federal institutions are involved: the Institute, the Royal Museum for Central Africa and the Royal Museum of Arts and History. The project goal is to give access through a single portal to archaeological collections physically located in the 3 institutions.

MARS framework is based on Zope and Plone. Its main functionalities are a bibliography management system, a complete metadata and digitalized content management system, and a thesaurus working as a multilingual search engine. On completion, users will have access to hundreds of thousands of records including library catalogues, collections and other documents (mainly in PDF format). In return for using freely existing code, the Institute has contributed to open source projects within the Plone Community. It initiated ATBiblioList and participated actively in the development of CMFBibliographyAT, CMFMember and Archetypes.

The objective of MARS is to deliver an open source platform free of charge providing a tool to manage archaeological collections and disseminate information to several target audiences. The Institute is actively looking for institutions willing to use MARS for their collections and agreeing to collaborate and share in the knowledge to further improve this platform.

[www.naturalsciences.be/MARS](http://www.naturalsciences.be/MARS)

David Convent – MARS Project Development Leader – January 2005