



# FOSS4G2006 - Free And Open Source Software

Contribution ID : 85

## An integrated freeGIS solution: MIPI project

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The project 'Habitat improvements for wildlife', sponsored by the Toscana Regional and the Pisa Provincial administrations and realized by Faunalia, is heavily geared towards geographical information. For every aspect of data management and analysis Faunalia is using exclusively free software:

data are stored in PostgreSQL/PostGIS

different database clients (geographic and alphanumerical) are used for administrations: psql, phpPgAdmin, PgAdminIII, OpenOffice, QGIS, UMN MapServer, p.mapper

analyses are run through PostGIS, GRASS and R

QGIS is also used for data visualization and checking, and printing for field surveys and dissemination of results

most data are available in real time for wider dissemination of results through a p.mapper web interface

Main analyses are:

home range size, overlap and localization of radio-tracked pheasants and other species

population density of pheasants, hares and passeriformes

habitat preferences for the same species

land use and landscape analysis

previsional models of habitat use

The use of a complete, powerful, well integrated suite of programs allowed us to create a multi-user (>12 professionals, students and volunteers, of very varied technical computer background and skills) environment, without data duplication. Thanks to interoperability, occasional functional limitations of single software packages are easily overcome by having several alternatives at hand.

It would have been infeasible to implement a similar infrastructure using proprietary software, because the budget of the project is of the same order of magnitude of the cost of licences needed.

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