LUP Dissertations

In 2006 Leiden University has initiated a series Leiden Dissertations at Leiden University Press. This series affords an opportunity to those who have recently obtained their doctorate to publish the results of their doctoral research so as to ensure a wide distribution among colleagues and the interested public. The dissertations will become available both in printed and in digital versions. Books from this LUP series can be ordered through www.lup.nl. The large majority of Leiden dissertations from 2005 onwards is available digitally on www.dissertation.leidenuniv.nl.

In this thesis, a collection of papers is put together dealing with various quantitative aspects of predictive modelling and archaeological prospection. Among the issues covered are the effects of survey bias on the archaeological data used for predictive modelling, and the complexities of testing predictive models using both old and new archaeological data. Furthermore, an attempt is made to reconcile the worlds of expert judgment and quantitative analysis by means of multicriteria decision making techniques and Bayesian statistics. The thesis also offers some alternative approaches to predictive modelling, like using prehistoric land use reconstructions, and the integrating of social and cultural factors into the models. It also gives an up to date review of the international and Dutch state of affairs in archaeological predictive modeling.

Philip Verhagen graduated in Physical Geography at the Vrije Universiteit Amsterdam in 1989. Since 1992, he has worked at RAAP Archeologisch Adviesbureau as a specialist in Geographical Information Systems, and has specialized in archaeological predictive modelling and the application of statistics in archaeological prospection. As such, he has worked on various archaeological projects in and outside the Netherlands, doing geographical analysis and quantitative research. Since October 2005, he is employed at the Hendrik Bruning Stichting of the Archeologisch Centrum of the Vrije Universiteit Amsterdam as a specialist in archaeological computing.