T. Weski

The Value of Prospection from an Users Point of View

Archaeological prospection is not done for scientific reasons alone, but it has also practical use for the creation of the record of archaeological sites. The first attempt for such a record was started in Bayern as early as 1880 covering the whole country. It was soon outdated and a second one was completed for one Regierungsbezirk (administration district) in 1909. For these and later attempts only visible monuments, e.g. barrows, hill forts etc. and stray finds were available. Therefore certain areas, for example the surroundings of Munich, where due to the geological situation stray finds are lacking, were regarded as being practically without any prehistoric settlements. This picture was completely changed with the introduction of aerial photography in the late 1970s. Suddenly it became obvious that in this previous archaeological desert there were hundreds of settlements, graveyards and former barrows. Thanks to these informations it was possible to conduct excavations before the sites were destroyed by building activities.

All local communities and other administrations are obliged to create land use and development control plans in which archaeological sites are included. Thanks to the results of aerial photography realistic informations can now be given to the planning authorities. Still aerial photography has a big drawback: the absence of evidence on photos does not necessarily mean that there are no archaeological remains buried in the ground; a fact, which is often difficult to explain to investors and other people. It happens again and again that in places where aerial photography gives hardly any results, e.g. in the green land areas close to the Alps, that archaeological sites are discovered unexpectedly during construction activities.

Other prospection methods, e.g. magnetometer or georadar are seldom used before excavations, because it is cheaper to remove the top soil in the endangered area and see what has to be done, particularly if these services are conducted by contract archaeologists. But for the protection of sites under the *Archäologische Reservate* and the *Grabungsschutzzonen* scheme various prospection methods are used to gain knowledge about the character and extent of the monument. Phosphate analysises are seldom made, but in one case it was possible to link these results to different parts of Early Medieval houses.

To sum up: the management of cultural heritage would only be able to fulfil about one fifth of its tasks without any archaeological prospection.



Fig. Distribution of archaeological sites discovered by aerial photography (shaded) and areas excavated prior to construction activities (black) east of Munich; Scale: 1:75 000 (Drawing: M. Vaeßen, Bayerisches Landesamt für Denkmalpflege, Abt. Bodendenkmalpflege, by courtesy of Bayerisches Landesvermessungsamt München, 1920/97)



J. J. M. Wippern

Integrated Archaeological Prospection: Some Case Studies

The "Rheinisches Amt für Bodendenkmalpflege/Landschaftsverband Rheinland" (Bonn) often carries out archaeological prospections e.g. in the preliminary stages of development plans or ahead of road construction. The first step is the analysis of the archive data like historical maps or the information about chance finds. The next step is systematic fieldwalking including single-find plotting. This method enables us to date the site and to define its extent approximately. Fieldwalking is not applicable to meadows and does not yield reliable information about the preservation of the features. By means of a subsequent geophysical survey using magnetic and/or electric prospection on selected areas it is possible to locate different archaeological objects very precisely. Based on the results of the geophysical survey well-aimed bore probes are carried out in order to prove the preservation. In difficult situations instead of bore probes you most likely use trial trenches.

Fig.1. A Roman Burgus near Pulheim/Rheinland

Combined results of fieldwalking on a harrowed field (K. Frank et al.), a geoelectric survey on a meadow (1.0 m-Twin-configuration; samplingrate 0.5 m x 1.0 m; gridsize 40 m x 20 m filtert; J. Wippern, G. Mosebach & J. Zechner) and trial trenches (K. Frank, Ch. Wohlfarth et al.)