



WOSSAC[®]



THE QUEEN'S
ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2015 & 2017

The World Soil Survey Archive and Catalogue

What is WOSSAC?

Founded in 2004, Cranfield University's 'World Soil Survey Archive and Catalogue' (WOSSAC) aims to develop an archive and catalogue of all substantial soil surveys, reports and maps made overseas, with particular reference to those by British companies and personnel, to provide a safe repository for endangered copies, and to make the accrued information widely available for consultation by interested parties.

Key activity

The WOSSAC Project has five key phases of activity:

- Contacting key stakeholders.
- Undertaking cataloguing of all surveys, providing this as an on-line resource.
- Establishing a physical archive of hard copies needing preservation; these being made freely available for consultation.
- Interfacing with regional and national parallel collections to create a global network to disseminate the holdings to key stakeholders.
- Scanning and uploading surveys for open web access.

Background

Large numbers of soil surveys have been made worldwide by British surveyors over the past 80 years. These data about soils, their nature, properties and potential use are vital to support the growing interest in soils on global and regional agendas and the increasing interest in sustainable development, food security and effective aid. Yet this information is in danger of being lost, destroyed or becoming unavailable – hence the pressing need for WOSSAC.

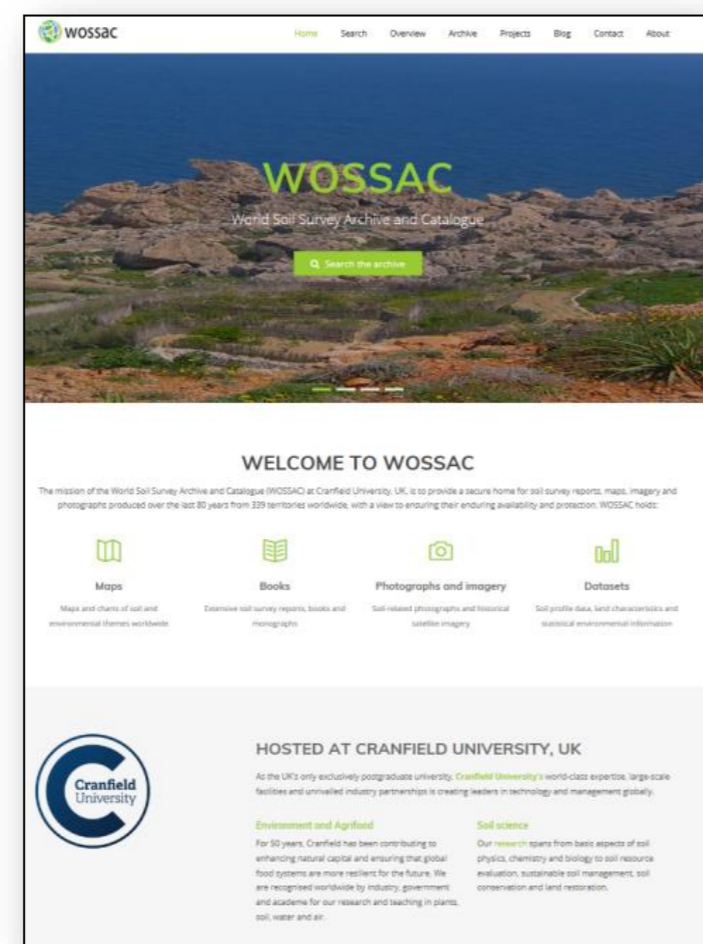
The information in WOSSAC can play a key role in a range of increasingly important contemporary issues including: soil management; extension of agricultural lands; optimal land use; food security; combating desertification; water use planning; monitoring land use change; soil carbon accounting and waste management.

The WOSSAC project has the support of the British Society of Soil Science (BSSS), the Tropical Agriculture Association (TAA), and NERC (NE/L012774), and is led by Cranfield University's Soil and AgriFood Institute, and Centre for Environmental and Agricultural Informatics Institute, incorporating the former National Soil Resources Institute (NSRI).

Many of the surveys were produced in limited print runs, many copies having since been lost. For some surveys, the private copies held by individuals are now the only remaining.

Example results

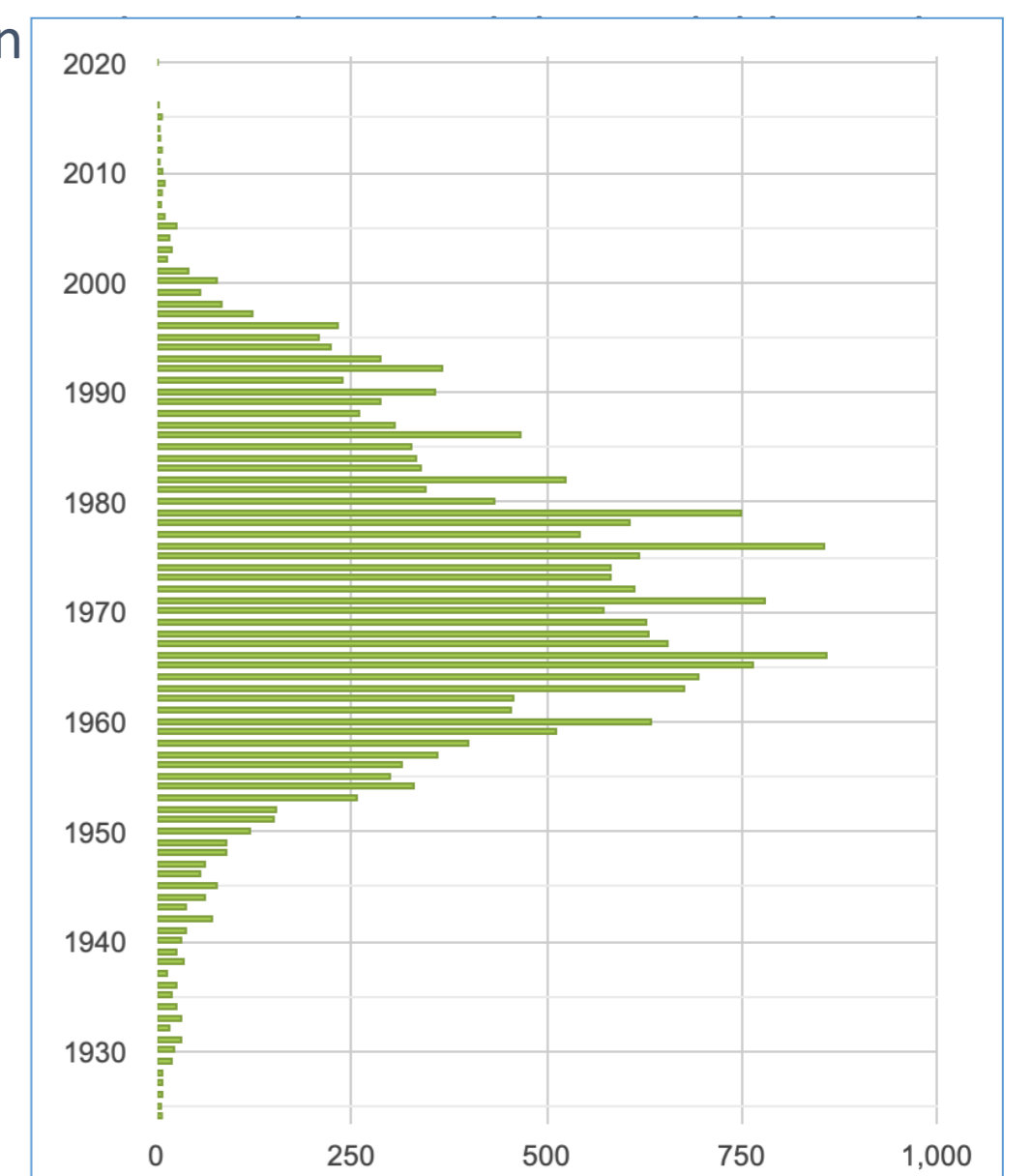
Large numbers of substantial soil surveys have been made worldwide by British companies over the past decades, mainly funded by development assistance donors, rough estimate, almost certainly surveys number many tens of thousands and by today's prices would cost many hundreds of millions of pounds sterling to repeat! So expensive would this prove never likely to be undertaken of these unique materials were in danger of being lost forever. The extremely valuable bank of their nature, properties and more important by the pressing as never before. Many of the UN goals can be directly related to and informed by the contents of the WOSSAC archive.



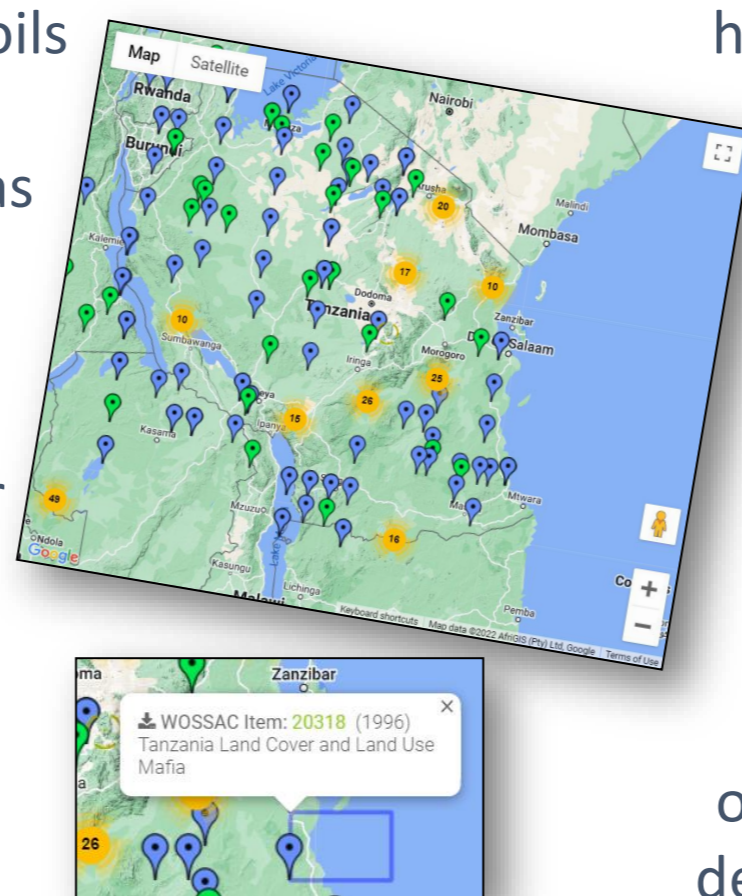
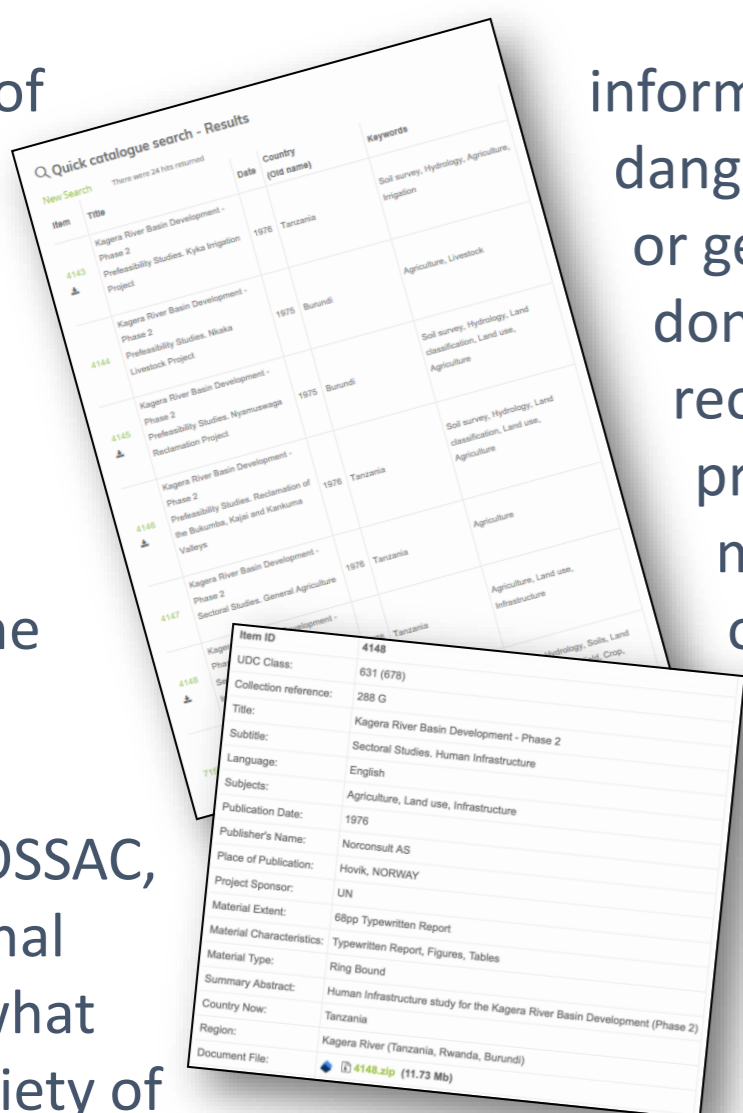
governments as well as representing 360 territories. A on the low side, is that such thousands and by today's prices million pounds sterling to repeat! that in truth such surveys are again; yet until WOSSAC, many scattered, unprotected and in WOSSAC Archive represents an international data about soils, potential use of land, made ever needs of the developing world Sustainable development

Holdings

Created to catalogue, archive and manage this important body of information stakeholder community, there are some 25,547 catalogued WOSSAC Archive Holdings, arising from some 373 territories worldwide. The earliest catalogued items is from 1857, the latest from 2016. The peak is from the mid-1970's – 1980's.

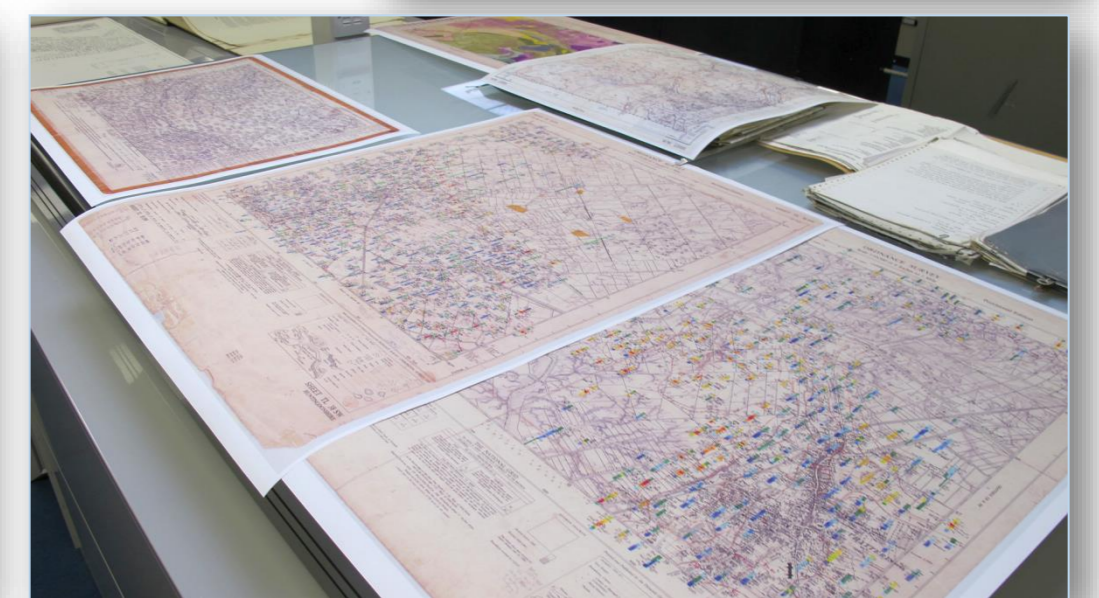


This body of grave destroyed original subject to that first acquired, many of the retired. information about world soils danger of becoming lost, or generally unavailable as donor funding agencies reorganisation, and the produced the surveys merged, downsized or original surveyors



has been in the have been companies have been closed, with now being

Before WOSSAC, international exists, in what British Society of International Union of Soil Sciences (IUSS) and the Tropical Agriculture Association (TAA), Cranfield University has established the archive. there was no resource-base state or how available it is. Therefore, at the behest of the Soil Sciences (BSSS) and with the full support of the



References Hallett, S.H., Sakrabani, R., Keay, C.A. and Hannam, J.A. (2017) Developments in Land Information Systems: Case studies in land resource management capabilities and options. Soil Use and Management. Volume33, Issue4. December 2017. Pages 514-529 doi: 10.1111/sum.12380 | Hallett, S.H., Bullock, P. and Baillie, I. (2006) Towards a World Soil Survey Archive and Catalogue, Soil Use and Management, 22 (2) 227-228. | Hallett, S.H., Baillie, I.C., Kerr, B. and Truckell, I.G. (2011) Development of the World Soil Survey Archive and Catalogue (WOSSAC) Commission on the History, Philosophy and Sociology of Soil Science, 18, pp14-17. | DeWitte, O., Jones, A., Spaargaren, O., Breuning-Madsen, H., Brossard, M., Dampha, A., Deckers, J., Gallali, T., Hallett, S.H., Jones, R.J.A., Kulasara, M., Le Roux, P., Michéli, E., Montanarella, L., Thiombiano, L., Van Ranst, E., Yemefack, M. and Zougmore, R. (2013) Harmonisation of the soil map of Africa at the continental scale. Geoderma. Vol 211-212, Dec 2013, pp138-153. http://dx.doi.org/10.1016/j.geoderma.2013.07.007.

Prof. Stephen Hallett

s.hallett@cranfield.ac.uk

www.cranfield.ac.uk

www.wossac.com

