

National Trust Modernises



The National Trust (UK) has purchased three Trimble GeoXT 2008 Series sub 1m GPS in a move to modernise its work practices by progressing away from paper maps and traditional survey methods towards the increased accuracy and faster results that GPS can bring.

The new systems, supplied by Trimble's UK distributor KOREC, have been supplemented with GeoBeacons for sub-metre accuracy in the field and will be used for a wide variety of applications in three of the National Trust's southern regions, Surrey, Kent and Sussex, Thames and Solent and Devon and Cornwall.

The National Trust is a massive land owner and as well as looking after historic properties, also has a large rental portfolio. The Trust's warden's were clearly keen to adopt new technology and their experiments with lower accuracy 'leisure' GPS convinced the Land and Property Data Officers of the three areas of the benefits a sub-metre accuracy system could bring. Regional Land and Property Data Officer for the southern region, Joanna McKenna is keen to point out that as a data officer, no day is typical - one moment they can be checking disputed boundaries in a rural location, the next, plotting new fence positions for submission to government grant schemes. Any new data capture system would therefore have to be versatile and reliable and consistently provide sub-metre accuracy as well as allowing users to define their own data dictionary for recording detailed attribute data.

Other users of GPS within the National Trust were consulted and their systems trialled but after an extensive evaluation process, the rugged Trimble GeoXT was selected for its ease of use and ability to deliver on all the key requirements.

One of the three systems is being used by Hayley Orchard, Regional Land and Property Data Officer for the Thames and Solent region. She reports that during a recent survey with the regional archaeologist, she was able to use either the OS MasterMap or aerial photography background mapping just to get her bearings. Despite the need to capture lots of varied attribute information, she is also confident that it's ease of use will make it suitable for volunteer archaeologists to use.

The system has also taken out the guess work when it comes to establishing boundaries. Previously this would be done with a tape survey, however now the Trust's Data Officers know that fences can be accurately positioned with the GeoXT making it an excellent tool for boundary disputes, with everyone involved more inclined to accept the results and consequently avoid prolonged disputes. The GeoXT has also enabled Hayley to record the position of a newly installed fence in a wooded area on a very steep slope - a job that would have been impossible using traditional survey methods because she was unable get any bearings or even see where the fence was going. The GeoXT mounted on a pole solved the problem immediately.

Joanna McKenna reports that the GeoXT has also allowed the region to make some substantial time savings. "The property wants to begin reinstating an orchard at Sissinghurst Castle in Kent which will consist of 1605 trees spread over a 6.3 acre site. To begin with the property only requires half the orchard to be marked out. The inner orchard trees are very specifically placed in rows 4m apart with either 2 or 3m gaps between each tree. To ensure that this is done accurately, we needed to plot the top and bottom of each row, negotiate paths across the orchard and then mark out one in five trees as a guide. Using our old style methods, this would have been a hugely challenging and time consuming job, probably taking weeks. With the GeoXT, it took 4 hours!"

Hayley concludes, "We predict that demand for our three Geos is going to be very high as our wardens and staff get to see the benefits first hand. The National Trust is a charity and because of that the buying process can be long and we have to be absolutely certain that we have purchased the best system for the job. KOREC's Martyn Palmer has been fantastic, endlessly patient, answering our queries and arranging trials and consequently we are convinced that we've bought the best system for the job."

