

# Mobile GPS Mapping Improves Indiana Land Trust Management



Conservation land trusts, one of the fastest-growing and most successful conservation movements in American history, are increasingly finding the benefits of the newest GIS technology. An example is Sycamore Land Trust, one of an estimated 1700 land trusts in the US. It conserves more than 5,500 acres on 66 parcels of beautiful southern Indiana open space.

Recognising that good land management calls for good mapping practices, Sycamore Land Trust, with the assistance of 39 Degrees North, LLC, GIS specialists and a business supporting sponsor of Sycamore Land Trust together with Magellan Professional, has taken steps to upgrade its GIS proficiency. The MobileMapper CX, GIS and GPS receiver and data collector has been employed in field studies.

John Lawrence, assistant director and chairman of the Stewardship Committee, oversees land management for Sycamore Land Trust. This includes the mapping of parcel boundaries, hiking trails, areas of invasive species and locations of rare plant species. Lawrence, who had until recently used a consumer grade GPS receiver, finds that mapping accuracy and efficiency has improved dramatically since he began using the Magellan Professional MobileMapper CX with Mobile Mapping software about two months ago.

"The metre to sub-metre accuracy of the MobileMapper CX helps speed locating existing monuments and markers, and I have more confidence that I am accurately walking boundaries," says Lawrence. Lawrence says much of his fieldwork is "an iterative process." For boundary work John starts by creating a polygon of the parcel in ArcView using survey information and legal descriptions. He exports the polygon as a shapefile to the MobileMapper CX using MobileMapper Office and overlays a topographic background map. On site, he walks the area with the MobileMapper orienting the polygon and making field adjustments based on found markers and monuments. "The MobileMapper CX is a huge time saver for me. Now when I am in the field, I always carry it so that I can easily add and update data at every opportunity," says Lawrence.

Sycamore Land Trust's new professional MobileMapper CX allows a much more efficient GIS update than the basic data collection which the organisation previously performed with a consumer GPS. The MobileMapper CX supports the ESRI .SHP file format and allows data import and export from the office to the field and vice versa. In addition, the MobileMapper CX is very rugged and safe for use in harsh outdoor environments. The MobileMapper CX is complete with field and office software that include a post-processing option enabling collected data to be improved to sub-foot accuracy.

For more information on Magellan Professional, visit the company [website](#).