

Surveying Overview

The ‘Collection’ wizard step allows you to collect elevation heights from your field. This is done to create a topographic representation of the field surface.

In T3RRA software collection is normally accomplished by driving over the surface of a field while logging GPS elevations. Once sufficient points have been collected (surveyed) they are then processed in order to create a Digital Elevation Model (see [definitions](#)). In T3RRA software we refer to this process as ‘Surfacing’ and this is performed in the next wizard step.

The key concept with surveying is: *“Collect enough points to create a good surface, but no more”.*

If you do not collect enough points from the field you will end up with a poor representation of the field. If you collect too many points you will have wasted time and fuel in order to create a surface that is not markedly better than one created from fewer points. As well as the number of points collected, the accuracy of the final surface depends on where the points are collected.

Getting a good representation of the field surface is not a difficult task. Getting a good surface representation while minimizing time spent doing it requires more effort and experience. Figuring out the total number of points to collect, and the best pattern to collect them in, is an art that requires experience. If you do a lot of it you will soon start to understand how to improve and optimize your surveying technique.

However, new and casual users need not despair. In general, we would advise users not to attempt to optimize this activity too much. Extra time spent getting a good survey is usually insignificant relative to the time spent moving dirt. A thorough survey and an appropriate design will save far more dirt moving time than any time added while over-surveying.

Also, be sure to read the section '[Surveying tips](#)' later in this document.
