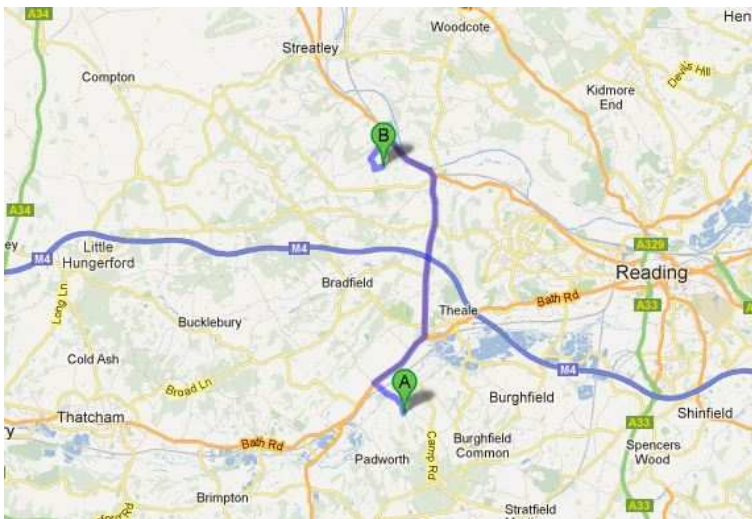# Stallfinder Postcode Searching Explained

Stallfinder uses a postcode-based distance searching system to allow users to find stallholders and events within a certain range. There are several ways to implement this sort of system and we've chosen one which generates results as fast as possible.

Our system compares the first part of the search postcode to the first part of the postcode of all the possible search results. The system stores a table of distances between postcode zones and uses this to report the distances in the search results.

There's a trade-off between the accuracy of the distance reported and the speed at which search results come back and we feel this is the best solution we can offer given the huge number of potential matches for any given search.

Example:

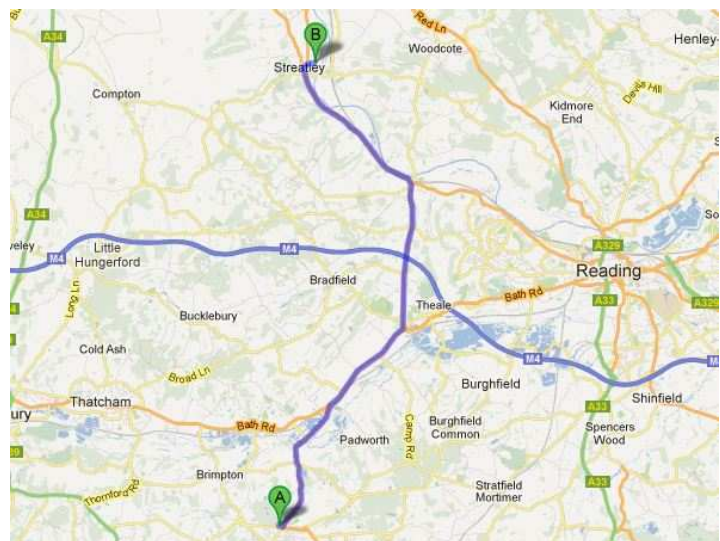You're looking for events within 30 miles of RG7 8HA (Aldermaston, Berkshire).

For the purposes of the search, the centre of the search will be the approximate centre of the area covered by the RG7 postcode, which is near Ufton Nervet (A on the map on the left).

An event with a postcode of RG8 9PR (Streatly) will use RG8 for the purposes of potentially matching this search. The centre of the RG8 area is near Pangbourne (B on the map on the left).

In this case, the driving distance from the centre of the RG7 area to the centre of the RG8 area is about 10 miles and this will be the reported distance in the search results to any event in the RG8 area.

In actual fact, the driving distance from Aldermaston to Streatly is more like 15 miles (A to B on the map on the right).

We realise that this sort of error will occur, sometimes making results appear a bit too close, and sometimes a bit too far. However, the error shouldn't ever be far too big and we hope you appreciate that without this compromise the searching would be much slower.

Of course, we need the system to work for all our users, so if you spot a major problem with the way it works, we'd greatly appreciate it if you tell us: info@stallfinder.com