## NOTES ON MOATED SITES IN MIDDLESEX

In earliest times the most common form of earthwork defence employed by primitive peoples was the dry ditch with the earth from this thrown inwards to form a rampart on the defenders' side of the work. A variation invented by the Normans was the motte, formed by spreading the earth taken from the ditch over the whole area enclosed by it, so as to avoid restriction of the available space by the rampart and at the same time to elevate the whole site above the level of the surrounding country.

The section of a dry ditch when completed should be as deep and as steeply scarped as possible so as to give the attacker the maximum amount of clambering up and down. If such a ditch should become waterlogged, however, especially if it become filled nearly to the brim, its defensive value would be much less in proportion to the effort expended in digging the ditch, than would have been the case had it been made wider and only just deep enough to prevent an attacker wading through it. With the wet ditch, therefore, width, and not depth, is the chief desideratum.

In Middlesex, where the soil is frequently waterlogged throughout the winter, the ordinary Norman dryditched motte is almost unknown; there appear to be only three or four of which traces remain to-day. On the other hand, there are over sixty moated sites of which records may be found, and traces of most of them remain to this day.

The wet moat is not an early feature of military engineering, necessitating as it does a knowledge of the methods of supplying and controlling water, accurate



surveying and levelling, and the construction of watertight ditches. As a defence to large castles, the moat did not appear until the end of the thirteenth century, when it may have been introduced as the best defence against the much-dreaded mine, the most formidable method of assault which a castle might have to contend against. The higher and heavier its masonry, the more efficaciously could it be mined unless the walls should be protected by a moat which would flood any mine gallery the besiegers might drive towards them.

One might expect to find the moated sites of Middlesex confined to the lower ground within the county. This, however, is not the case, as if a moat be supplied with water merely by constructing it beside a stream and letting this flow round it, the result is likely to be that the ditches will constantly become silted up and choked with weeds and water-borne rubbish of all descriptions. Thus the ideal site for a moat is where it can be supplied from a natural spring, the ordinary course of the stream from which will also serve as overflow and keep the water in the ditches fresh.

Moated sites may, therefore, be found on the highest ground, provided there be springs nearby which will fill their ditches. Indeed, the higher the site, the more efficient the work may be.

Generally speaking, therefore, moats will be found to be less common beside rivers flowing through flat lowlands than in a district well supplied by swift, if small, streams. These conditions will be found to hold in the case of Middlesex.

A few of the sites marked on the map may represent earlier earthwork converted, but by far the majority are ordinary rectangular moats of probably the fourteenth and fifteenth centuries.

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303