Three Fishponds at Thame, Oxon., 1973

By R. A. Chambers

INTRODUCTION

A GROUP of three fishponds at Thame was investigated by a rescue excavation during June 1973, prior to the development of the site for house building. The ponds[1] comprised three large rectangular hollows arranged in parallel with long axes north-south. An embankment formed the northern end and a leat ran along the east side of the group. These ponds appeared to have been linked to a water-filled moat[2] at the southern end. Excavation revealed that the ponds were not lined and that they had been cleaned, probably at regular intervals. These ponds had previously been interpreted as medieval and although no conclusive dating evidence was found, a reappraisal of documentary and topographical evidence suggests a post-medieval construction date. The ponds had fallen into disuse by the late 18th century.

The excavation was conducted on behalf of the Oxford City and County Museum and I should like to thank Mr. John S. Sermon, Chairman of the Thame Historical Society, Mr. P. D. Whiteman and all the volunteers who assisted with the excavation. I am indebted to Mr. M. Aston of the Oxford City and County Museum for much valuable help and advice. I would also like to express my greatest thanks to the owners of the site, Rialto Builders Ltd. for their help, especially with the loan of mechanical excavators and for permission to excavate the site. Thame Urban District Council contributed towards the cost of the excavation. Mr. John Hazelden of the Soil Survey of England and Wales generously gave both time and advice on geological conditions. The Commonwealth Forestry Commission, Dept. of Forestry, Oxford University, kindly identified several samples of wood.[3]

SITUATION

In Thame most of the land lies between the 60 m. and 75 m. contours, rising gently from the edge of the river west towards the Chilterns.[4] The ponds are located on low-lying meadow land, area centred SU 71080625 (FIG. 1). The locality is marshy in places and has been recorded since medieval times as susceptible to winter flooding.[5] Several small, permanent streams flow across this area, westwards into the River Thame. They emanate from springs at the bottom of the low Portland Limestone hills to the east and north.

The geology of this low-lying area consists of impervious Kimmeridge Clay

[1] The site records are deposited at the Oxford City and County Museum, Woodstock, P.R.N. no. 5247.
[2] O.C.C.M., P.R.N. no. 5246.
[3] Mrs. J. M. Chambers kindly typed out the text.
[4] *V.C.H. Oxon.*, VII, 162.
[5] *Ibid.*, 162.

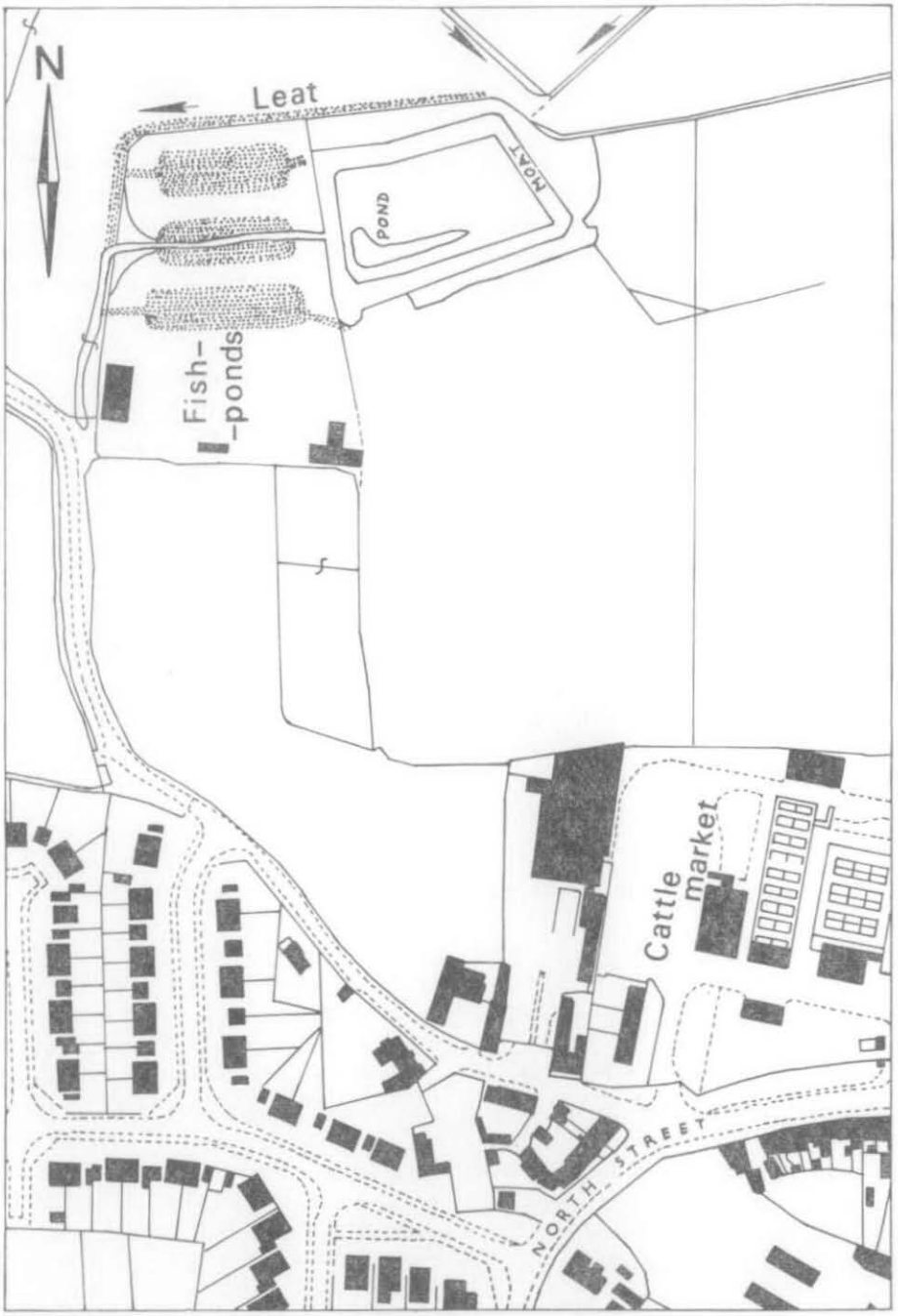

FIG. 1
Location Plan.

which is overlain in places by the Thame Sands.[6] The whole area is covered by 0·7–1 m. of a brown, sandy, clay subsoil containing much broken, water-worn flint. The moat was dug directly into the Kimmeridge Clay but the northern end of the fishponds overlies the Thame Sand.

THE EARTHWORKS

A survey of the earthworks was undertaken to record the remaining topographical features (FIG. 2). The site, which was under pasture, comprised three long, rectangular ponds, each of similar width and arranged in parallel with each pond sharing a bank with a neighbouring pond. The west pond, P3, was longer than either of the other two.[7] Although the contractors had already dug a 3 m. wide trench N.E.-S.W. across the site removing the southern end of the western pond, it was possible to add this to the plan from aerial photographs (FIG. 2).[8] The ground surface upon which the ponds were constructed sloped gently downwards from south to north. This resulted in the ponds having been dug deeper at their southern than at their northern ends, and the banks built higher at their northern than at their southern ends to keep them level.

At the southern end of the group lay a rectangular, water-filled moat some 60 m. ×90 m. and 9 m. wide with a small westerly extension on the N.W. corner. A small, wooden, Victorian sluice gate within the moat allowed water to flow into a stream which ran northwards down the axis of the centre pond. The moat enclosed the remains of a once ornate Victorian water-garden of which the small pond, P4, crossed by an ornamental footbridge appeared to be a part.

A heavily silted leat flanked the eastern side of the moat and fishponds and turned westwards across the northern end of the ponds. Originally the leat had carried water northwards, though at the time of excavation, above the point where the leat received the stream from the centre pond, it was dry.

THE EXCAVATION

Excavation was confined to the areas that were not to be used for building foundations.

Trench I sectioned the sluice channel at the northern of the eastern pond P1 (FIG. 3). This sluice channel allowed water flowing through the pond into the leat, the pond being retained by a sluice gate. No trace of this sluice gate was found though only the northern half of the trench was dug deep enough to uncover any remaining part of the sluice. Probably soon after the ponds had fallen into disuse the sides to the channel had fallen in and filled the channel with bank material (FIG. 3, Section S3-4). The channel bottom had been preserved by 0·1 m. of grey, clayey silt which indicated a channel width of approx. 0·65 m. From the interpretation of section S3-4 the channel was at least 1·7 m. deep from the top of the original bank. In modern times three successive land drains had been inserted at this low point in the bank to drain the pond more effectively. The earliest drain

[6] W. J. Arkell, *The Geology of Oxford*, (1947).

[7] It is difficult to measure the exact dimensions of the ponds by the nature of their construction and this is discussed later.

[8] Courtesy of the Dept. of Soil Survey for England and Wales and privately of Mr. P. D. Whiteman.

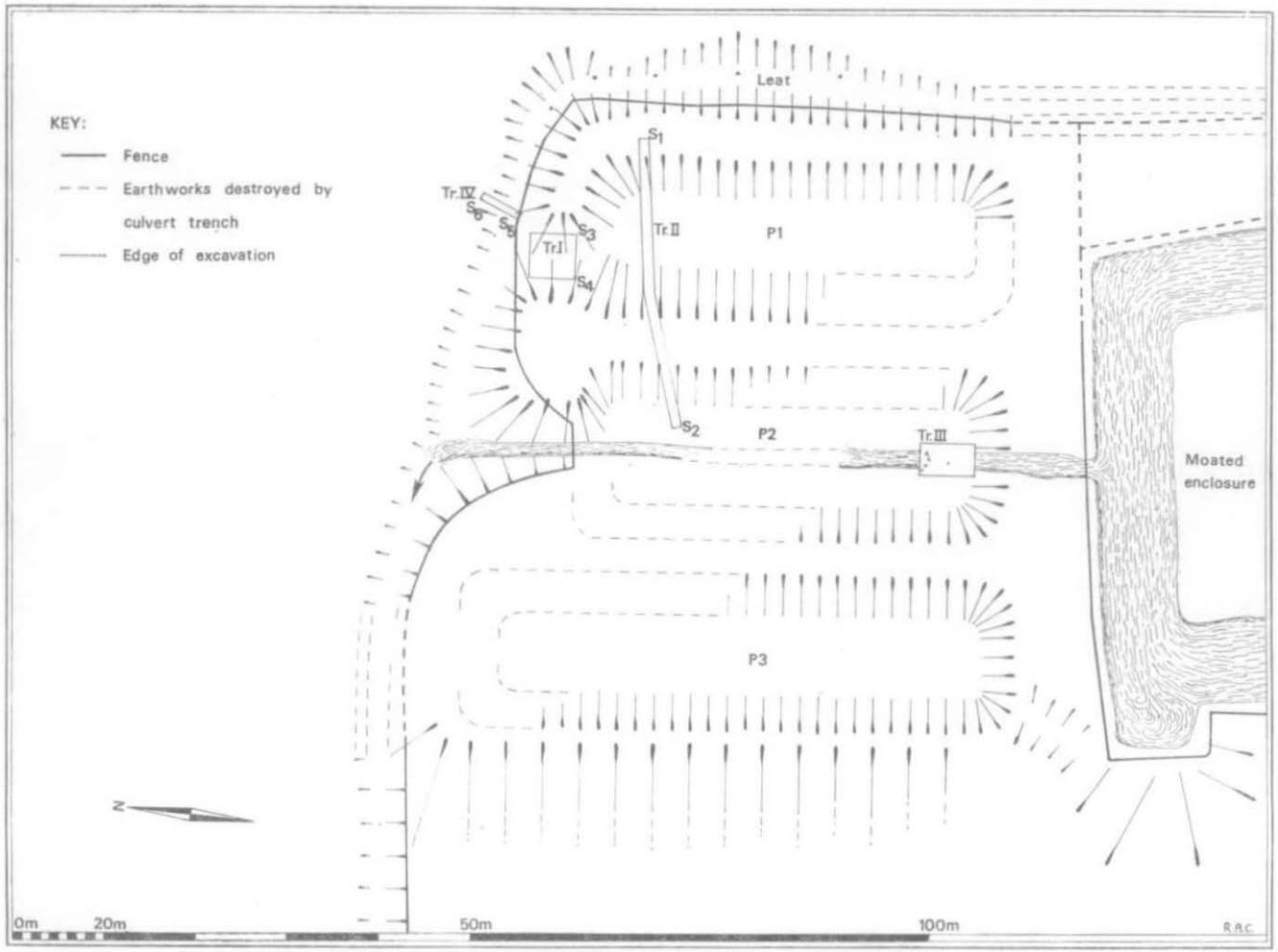

FIG. 2

The Earthworks.

belonged to the 19th or early 20th century. Each drain had been replaced as it became blocked with silt.

Trench II was a machine dug section across the eastern pond, P1, and part of the centre pond, P2 (FIG. 2, Section S^{1-2}). This trench demonstrated that the pond banks had been constructed of soil dug from the bottom of each pond. Pond P1 was shallow with a depth from the present bank top to the pond bottom of approx. 1·5 m. The bottom of the pond was covered by a grey, clayey silt which varied in depth from 0·1–0·3 m. (layer 13, Section S^{1-2}, FIG. 3). This silt was similar to that which filled the bottom of the sluice channel at the northern end of the pond. Neither silt contained any fish or identifiable plant remains.[9] The section also indicated that the pond banks sloped into the pond at an angle of 30°–35° but this angle may have been slightly steeper at the time of construction. There was no evidence of an impervious puddled clay lining, nor within the limits of the trench was there any evidence that piling had been employed to strengthen the construction of the banks. In section S^{1-2}, the eastern edge of Pond P2 was not clearly defined. It appeared that a part of the bank had slipped into the pond whilst the bottom was almost clear of silt. However, enough silt was present to draw a distinguishing line between the mixed pond fill and the undisturbed natural Thame Sand.

Trench III uncovered a board of 18 mm. thick sawn elm that had already been partly uncovered by the stream at the southern end of the centre pond (FIG. 2). The board was positioned within the pond itself, blocking a shallow channel, the sides of which appeared to have been eroded back from the ends of the board by flowing water. The board rested against two elm stakes driven into the ground, both on its northern side. Both these stakes were broken off level with the top of the board. The remains of three other stakes, also of elm, were found in position as shown on the plan, broken off just above the channel bottom and it is probable that these three stakes were associated with the board. The shallow channel had been buried by a waterlogged layer of detritus derived from the surrounding vegetation and this layer sealed the board and the stakes. This in turn had been sealed by soil containing much rubble and some 19th-century pottery.

Trench IV was a mechanically dug section across the leat (FIG. 3, Sections S^{5-6}). This section revealed that the leat, now heavily silted, was originally 1·3 m. deep by approx. 3·5 m. wide. It was not evident whether the leat had been cleaned regularly.

At the northern end of the ponds the line of the leat had moved 1 m. northwards or sideways due partly to the large amount of silt washed in from the pond bank on its southern side and partly from cattle wearing back the northern edge. This section has been published in outline only as it collapsed before completion.

THE CONTRACTOR'S CULVERT TRENCH

The mechanical excavation of this pipe trench through the northern end of the west pond, P3, brought up pieces of three separate land drains, similar to those used to drain the eastern pond. From the west and centre ponds several large elm timbers were brought to light (FIG. 4). From the evidence of the silt which adhered

[9] Examined by Mark Robinson.

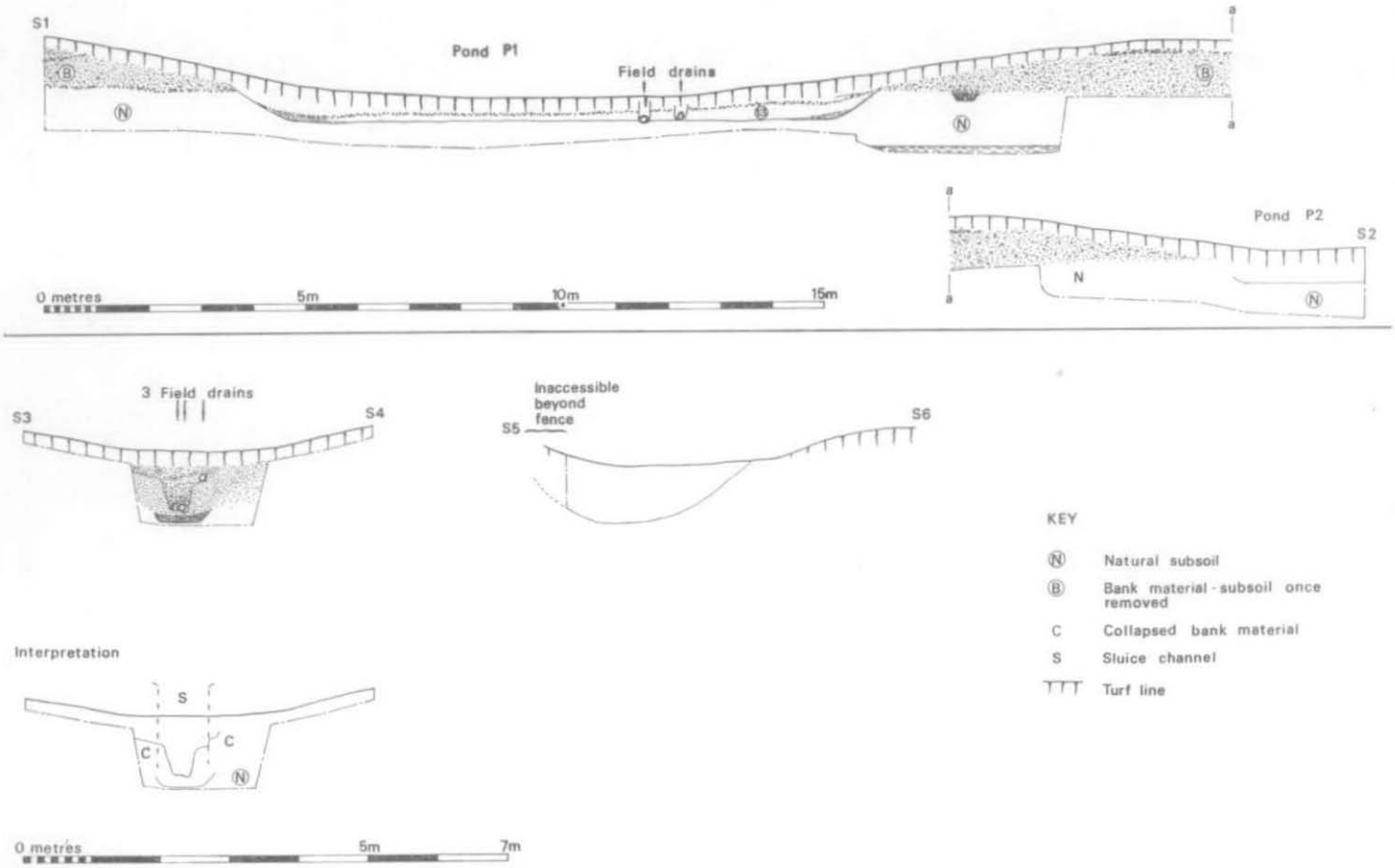

FIG. 3
Sections

to the timbers they appeared to have been resting on the bottoms of the ponds. Also from this trench it was evident that the western pond had been cleared as regularly as the other two and that it had been constructed in the same fashion.

THE FINDS

POTTERY

The earliest pot from the site was an unglazed base-edge sherd from a sagging-based cooking-pot in a coarsely gritted, thin fabric, probably a local, early medieval type. This was found in the collapsed bank material in Trench I (FIG. 3). Ceramic material of 18th, 19th and 20th century date[10] was recovered from layers sealing the pond sediments and also from the material sealing the vegetation detritus in Trench III at the southern end of the centre pond.

WOOD

Several timbers, which suggested parts of a sluice gate, were recovered from the ponds, of which nos. 1, 2, and 3 (FIG. 4) were found in the spoil from the contractor's culvert trench. All the wood was elm except for the oak dowels that pinned the mortice joints. Not illustrated is an elm stake-end from the bottom of Pond P3. The stake is approx. 60 mm. dia., axe—sharpened, broken off 0·36 m. above its point.

Descriptions (FIG. 4)

1 Elm ; 1·8 m. long, saw-trimmed from single bough or bole, 0·37 m. × 0·22 m. rectangular cross-section, with both ends sawn square. Each end contains a pair of right-angled morticed joints pegged with approx. 25 mm. d. oak dowels. Possibly part of a sluice gate. Bottom of Pond P2.

2 Elm ; 1·3 m. long, saw-trimmed from single bough or bole ; rectangular in cross-section with both ends sawn square. Right-angled mortice joint 0·1 m. from one end. Damaged by mechanical excavator. Bottom of Pond P2.

3 Elm ; saw-trimmed edges, one end sawn square, other end broken off. Rectangular, pegged mortice joint 0·1 m. from sawn end. Bottom of Pond P3.

CONCLUSIONS AND DISCUSSION

There is a general paucity of documentary evidence for medieval fishponds although these were a common feature of the medieval landscape. No documentary record has been traced concerning either the ponds or the moat at Thame. The ponds are situated close to the site of the Baldington manor house which was almost certainly the most important lay house in Thame during the Middle Ages.[11] The house, which was demolished in the 19th century, lay close by in Friday Street (now North Street, FIG. 1), on the eastern side and at the High Street end in Lee's Close.[12] The Baldington manor was first mentioned in 1419 when it was held of the Bishop of Lincoln whose overlordship is last mentioned in the middle of that century.[13] The estate maps of the manor can no longer be located.[14]

[10] Mrs. J. de Goris kindly identified the post-medieval pottery.
[11] *V.C.H. Oxon.*, VII, 167.
[12] *Ibid.*, 167.
[13] *Ibid.*, 172.
[14] The estate maps were said to be inaccessible in J. H. Brown and W. Guest, *History of Thame* (1935), 11–54.

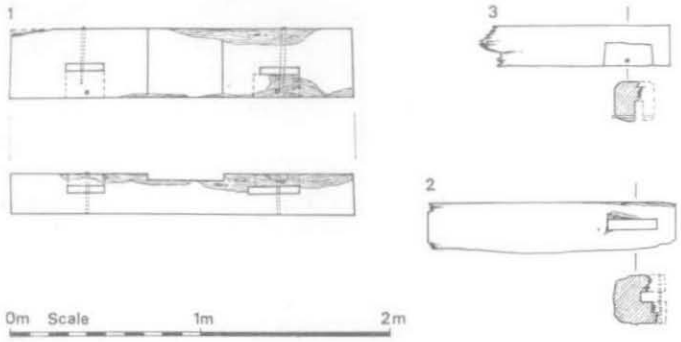

FIG. 4
Timbers removed from the Ponds. Scale $\frac{1}{40}$.

The excavation was not able to establish a construction date for the ponds whether medieval or post-medieval but the ponds had certainly fallen into disuse by the 18th century when they became partly filled with domestic refuse. The western pond contained the most refuse and the eastern pond the least.

An indenture of 1561[15] records the mortgaging of Baldington to John Pears, a London fishmonger. The indenture lists the house and estate in detail but fails to mention the fishponds. This suggests that the ponds were either out of use or not yet built.

Examples of this small, well laid out, parallel grouping of fishponds as at Thame, are rare in the Midlands,[16] and significance should be attached to the closeness of a similar pond layout at Notley Abbey (Augustinian) in Buckinghamshire, only 3 km. from the present site.

A group of ponds similar to those at Thame exists at Wolvershill Hall, Bramcote in Wolvey parish, Warks.,[17] in association with a moated site near the deserted medieval village. However there is the same paucity of dating evidence for this pond group as there is at Thame. The only documentary evidence suggesting the previous existence of a set of fishponds at Wolvershill Hall is by inference from the field name ' Pools ' recorded on the Baulkington Tithe Map of 1843.[18] The remains of the ponds since found in this field are not outlined on the map suggesting that they had fallen into disuse some time previously.[19]

However, this type of fishpond layout is more often found on medieval monastic sites such as the Benedictine Abbey of St. Benet's of Holme, Norfolk,[20] the Augustinian Abbey of Thornton, Lincolnshire[21] and Notley in Buckinghamshire.[22]

The relationship between the fishponds and the moat is at present unclear and

[15] Rousham Archives, N.473.
[16] M. Aston, *The Utilization of Water Resources in the Medieval Midlands*. Institute of British Geographers Annual Conference, 1973. (Unpublished).
[17] C. J. Bond, ' Deserted Medieval Villages in Warwickshire : A Review of the Field Evidence ', *Transactions of the Birmingham and Warwickshire Archaeological Society*, LXXXVI (1974), 102.
[18] Warwick County Record Office, CR569/53.
[19] Information kindly supplied by Mr. C. J. Bond.
[20] D. Knowles and J. K. S. St. Joseph, *Monastic Sites From the Air* (1952), 24.
[21] *Ibid.*, 200.
[22] *Ibid.*, 202.

only further excavation can provide an answer. The earliest record of this moat is on the Inclosure Award map of 1823 by which time it had attained its present form. Rectangular, fully enclosed moats are common throughout the medieval period and if the Thame moat had a medieval origin, perhaps associated with the early manor, much information must have been destroyed by the redigging of the moat and the creation of the garden inside. The present interior of the enclosure is embanked at the southern end, with a break for a footbridge, and also to a lesser extent at the northern end where a late 19th- or 20th-century gazebo had been built. The enclosure earthworks, although in a minor key, compare with the accepted principles for water gardens from the 16-17th centuries as at Croydon Wilds, Cambridgeshire,[23] or the 18th century and later at Kingston Wood Farm, Kingston.[24]

The ponds relied upon the northern side of the moat for their water supply. A portion of a channel to the head of the western pond P3 (FIG. 2) has been filled in, leaving a linear depression. The ponds did not contain an impervious clay lining and this was probably not deemed necessary with a constant supply of water which could maintain a gentle flow through each pond. The absence of any clear turf line at the base of each pond bank suggested that the turf was stripped prior to their construction and saved to line the ponds and banks afterwards to stabilize the earthworks. The banks appeared in section to be built solely of soil from the excavation of the ponds. There was no sign of stone or wood revetting or lining, nor of timber piling within the banks themselves, a practice mentioned by writers on animal husbandry in the 16th and 17th centuries. Similarities in the construction methods have been noticed during the destruction of other fishponds at Meppershall, Beds,[25] and Sibthorpe, Nottinghamshire,[26] where also no archaeological dating evidence was found.

Each pond held approximately 0·1 acre of water and could have supported 20–30 lb. of tench, perch and bream, all of which do not need much oxygen, especially if left undisturbed.[27] These species are recommended by writers of the 16-18th centuries as well suited to such conditions.

A Department of the Environment publication grant for this paper is gratefully acknowledged.

[23] Royal Commission on Historical Monuments, England, *Cambridge* (1968), Pl. LXIII and 76.
[24] *Ibid.*, Pl. LXIII and 159.
[25] *Medieval Archaeology*, XII (1968), 206.
[26] *Ibid.*, 206.
[27] I am grateful to Dr. C. F. Hickling for this information.