



RE-B Wild Water Project: Report #1 Ponds & Lakes

Norman Jackson



Introduction

Re-Betchworth Ecology, Environment & Climate Group's action plan includes an interest and concern for water. Our first concern is for the wild water that nature provides through rainfall in our river, streams, ponds, lakes and drainage ditches. Plant and animal life depends on this water and the question we are asking is 'what more can we do to protect, conserve and expand this essential resource, and make more effective and productive use of the water that nature provides?' Our second concern is for the water that is provided to our homes through SES Water (Sutton and East Surrey). Here our concern is focused on reducing consumption and making more effective use of the water we consume by storing and reusing it, for example by recycling 'grey water' in our gardens.

This report addresses our first concern and it attempts to document the ponds and lakes of the Betchworth and Buckland Parishes. Ponds and lakes were identified on 1:10,000 scale OS Maps printed at poster size. Remote sensing imagery was also used to verify and refine water-based features including Google Earth, Bing Landsat and LIDAR. Older OS Maps including the 1840 Tithe map, 1875 25" to 1 mile and 1890-1913 OS series maps. This allows for ancient ponds and waterways to be distinguished from modern ponds and enables a historical perspective to be gained on some of our waterways. Where possible water features were verified on the ground and a photographic database was constructed.

The report is in two parts. Part 1 contains an inventory of the ponds and lakes (Table 1) together with their location shown on OS Maps on pages 4-10. The second part provides a photographic database which can be developed as new ponds are added to the database or existing ponds are restored/regenerated.

Ponds & lakes

According to the Pond Book published by the Freshwater Habitats Trust, a pond is a man made or natural waterbody between 1m² and 2ha in area (20,000m² equivalent to a 200mx200m rectangle) which hold water for 4 months of the year or more (Pond Conservation Group 1993). Using this definition most of the water gathering structures in the area covered by the report are ponds with only a small number of lakes in the Buckland area reaching over 2ha. Ponds and lakes are a valuable resource as biodiverse, natural, freshwater ecosystems but they have many other valuable uses including providing water for agriculture, livestock and communities, providing places for sporting and leisure activities, aiding in habitat restoration, serving as breeding grounds for local and migrating species, decorative components of landscape architecture, flood control basins, general urbanization, interception basins for pollutants and sources and sinks of greenhouse gases and energy sources. Ponds and lakes often serve multiple purposes – they have aesthetic value as well as serving the needs of plants and animals.

Table 1 Inventory of Ponds & Lakes in Betchworth & Buckland

Ancient ponds are longstanding features in the landscape appear on maps that were published before 1922 all other ponds are classed as modern even though some of them may be over a century old.

Pond or Lake	Age	Liner	Page	Comments
1 Coach House	Modern		11	duck pond
2a Wildecroft Cottage	Ancient			
2b nr Wildcroft Cottage	Ancient	Natural		
3a Old Kemps Farm	Ancient	Natural	12	
3b nr Old Kemps Farm	Ancient	Natural		
4 Underhill Farm	Ancient	Natural		
5a Chalklands	Modern	Artificial	13	constructed in 1970s
5b Chalklands Woodland	Modern	Natural	13	
6 Knights Garden Centre	Modern	Artificial	14	
7a Crossways Farm	Ancient	Natural	15	natural drainage chanel dammed
7b Meadow View	Ancient	Natural	15	natural drainage chanel dammed
8 Sunny Banks Farm	Ancient	Natural	16	
9a Potters farm (new pond)	Ancient	Natural	17	overgrown pond I depression
9b Potters Farm (old pond)	Modern	Natural	17	
10 Old Fish pond	Ancient	Natural	18	caused by damming Slough Brook
11 Betchworth Village pond north	Ancient	Natural	19	caused by damming Slough Brook
12 Buckland Village Green pond	Ancient	Natural	21	spring fed clay lining
13 Buckland village house ponds				
14 Slough House				
15 Hillview Cottage				
16 Tap Wood ponds and lakes complex	Modern	Natural	22	resulting from sand mining
17 Buckland Park Lake	Modern	Natural	23	resulting from sand mining
18 Small pond	Ancient			caused by damming Shag Brook
19 Small pond behind Squires				caused by damming Shag Brook
20 Betchworth Village pond central	Ancient	Natural		caused by damming Slough Brook
21 Betchworth Village pond south	Ancient	Natural	24	caused by damming Slough Brook
22 Wonham Manor	Modern		25	
23 Wonham Mill pond	Ancient	Natural	26	caused by damming Shag Brook
24 Fryleigh Cottages	Ancient	Natural	27	
25 Oxbow ponds or flood defenc		Natural		
26 Wear Mead Farm/Wheelers Lane	Ancient	Natural	28	
27 Gadbrook Old Farm	Ancient			
28 Gadbrook Farm	Ancient	Natural	28	
29 Holly Cottage	Ancient	Natural	27	
30a Orchard cottage	Ancient	Natural	27	
30b Snowerhill Cottage	Modern	Artificial	27	
31 Ashcroft Farm				
32 Hall Farm	Modern	Natural	28	
33 Farm N of Gadbrook Rd nr well				
34 Little Abbots Farm	Ancient			

In the Betchworth & Buckland parishes, many ponds have existed for a long time. In Table 1 the distinction is being made between *ancient* – ponds appearing on maps before 1922 and *modern* – newer than 1922. A small number of ancient ponds shown on the 1875 map are no longer present in the landscape (Table 2)

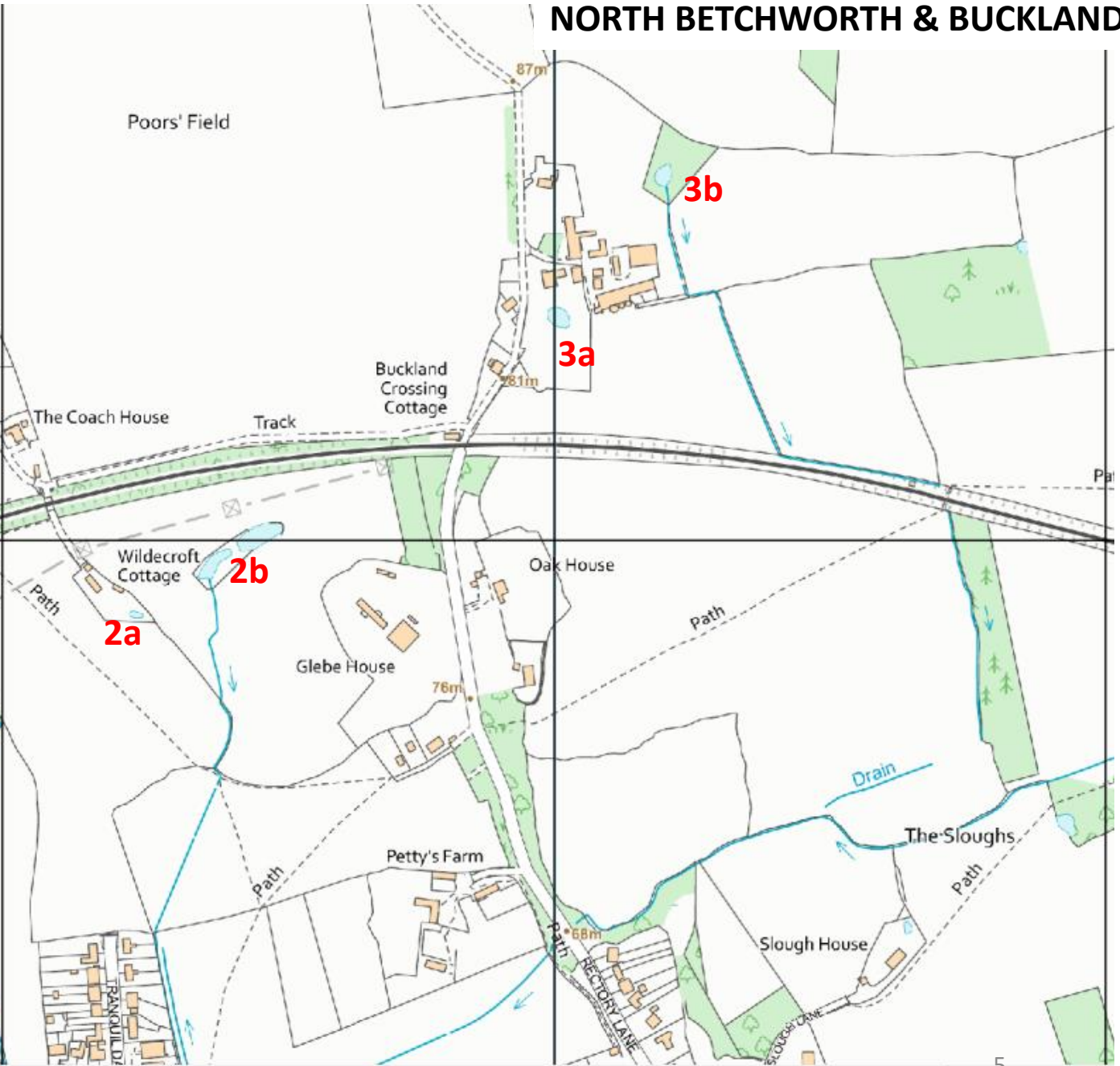
Table 2 Ancient ponds (shown on 1875 map) that are no longer present

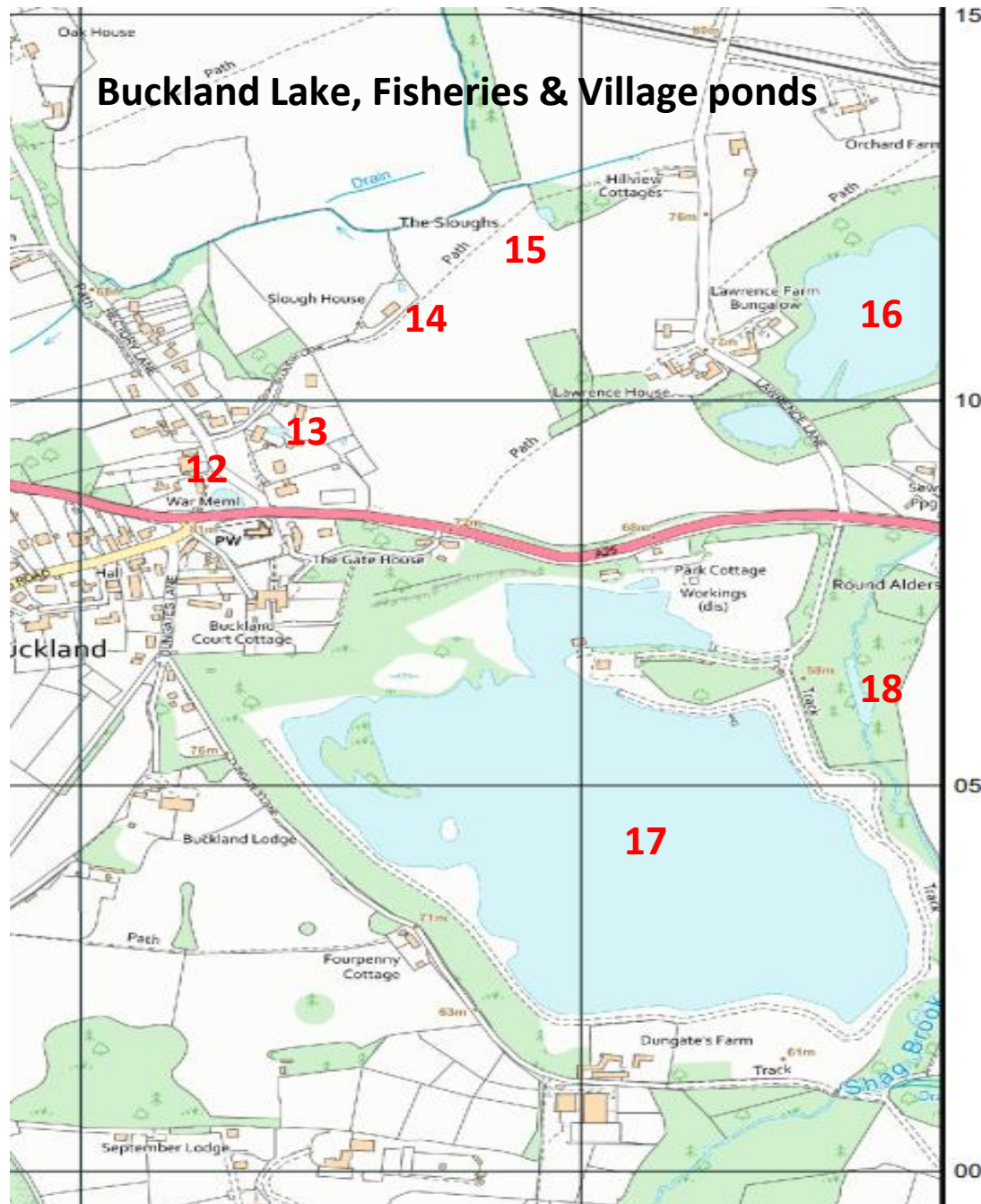
1. Near Wellhouse Rd junction
2. Snowerhill Farm
3. Small ponds north side Wellhouse Lane
4. Stroodgreen Farm
5. Wonham Manor

Naturally occurring ponds are often located in topographic depressions where the ground intersects the water table or at or near a spring line (e.g, Buckland Village pond). Artificial ponds have been created by damming streams for example along the Sloughs Brook and Shag Brook watercourses. The two large ponds that run parallel to The Street in Betchworth are the result of damming Sloughs Brook and the mill pond at Wonham is the result of damming Shag Brook. In the far south at Hall Farm a pond has been created by creating a weir on Gad Brook.

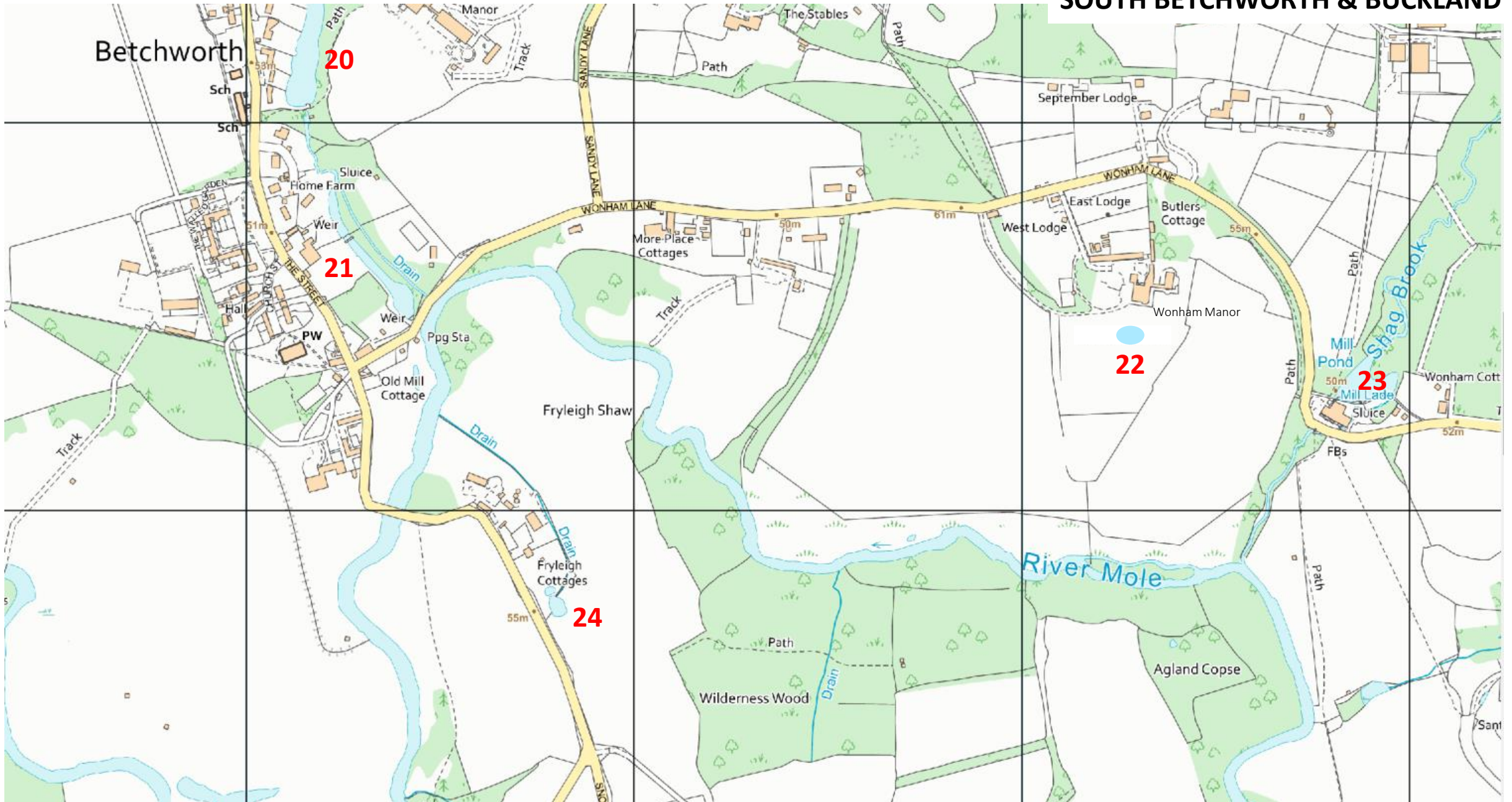
Buckland has several large lakes – the 50 acre Buckland Park Lake and smaller Taplow Lakes which now provide sport (commercial fishing, paddle boarding) and leisure facilities. The lakes were produced through the quarrying of high quality silica sands between 1955-1990. When quarrying ceased, lakes formed naturally in the depressions that were below the water table as the Lower Greensand is a natural aquifer.

In addition, there are many artificial ponds created by property owners which often serve dual purposes of enhancing the aesthetic appeal of their garden and providing new habitats and resources for plants and animals.

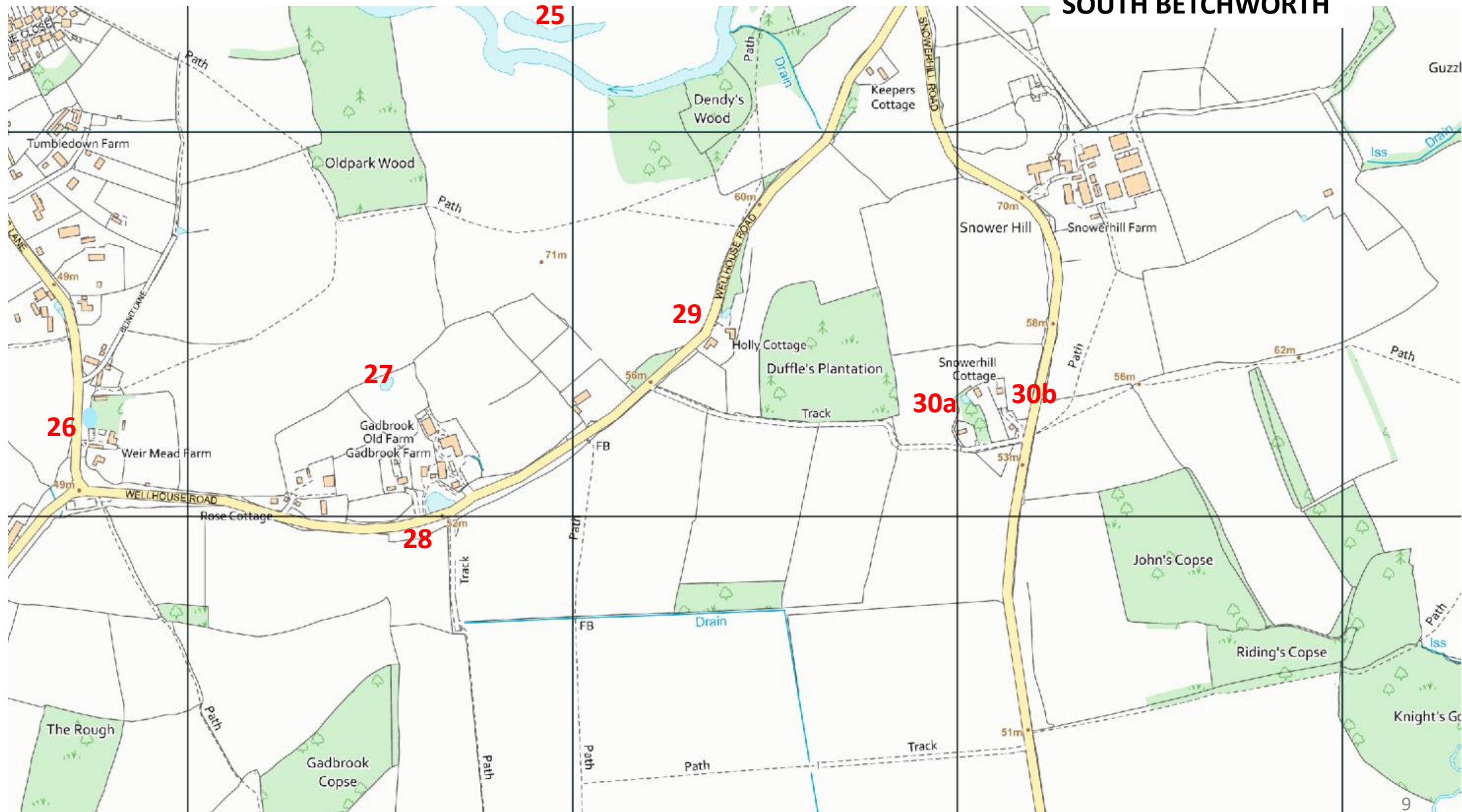




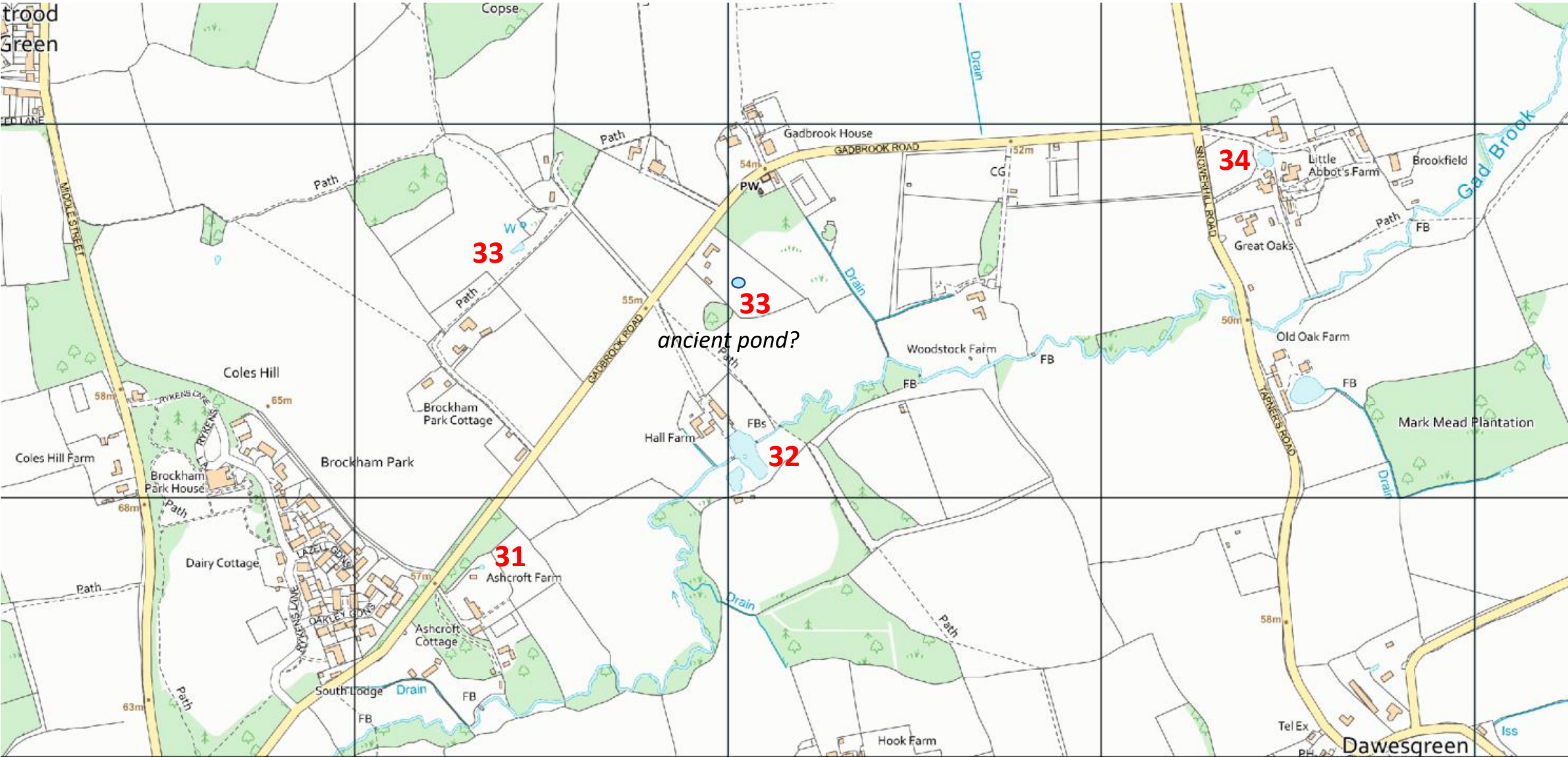
SOUTH BETCHWORTH & BUCKLAND



SOUTH BETCHWORTH



SOUTH BETCHWORTH



1 Coach House (modern duck pond)



POND 3a Old Kemps Farm



POND 5a Chalklands



PONDS 5b Chalklands Woodland ponds



POND 6 Knights Garden Centre



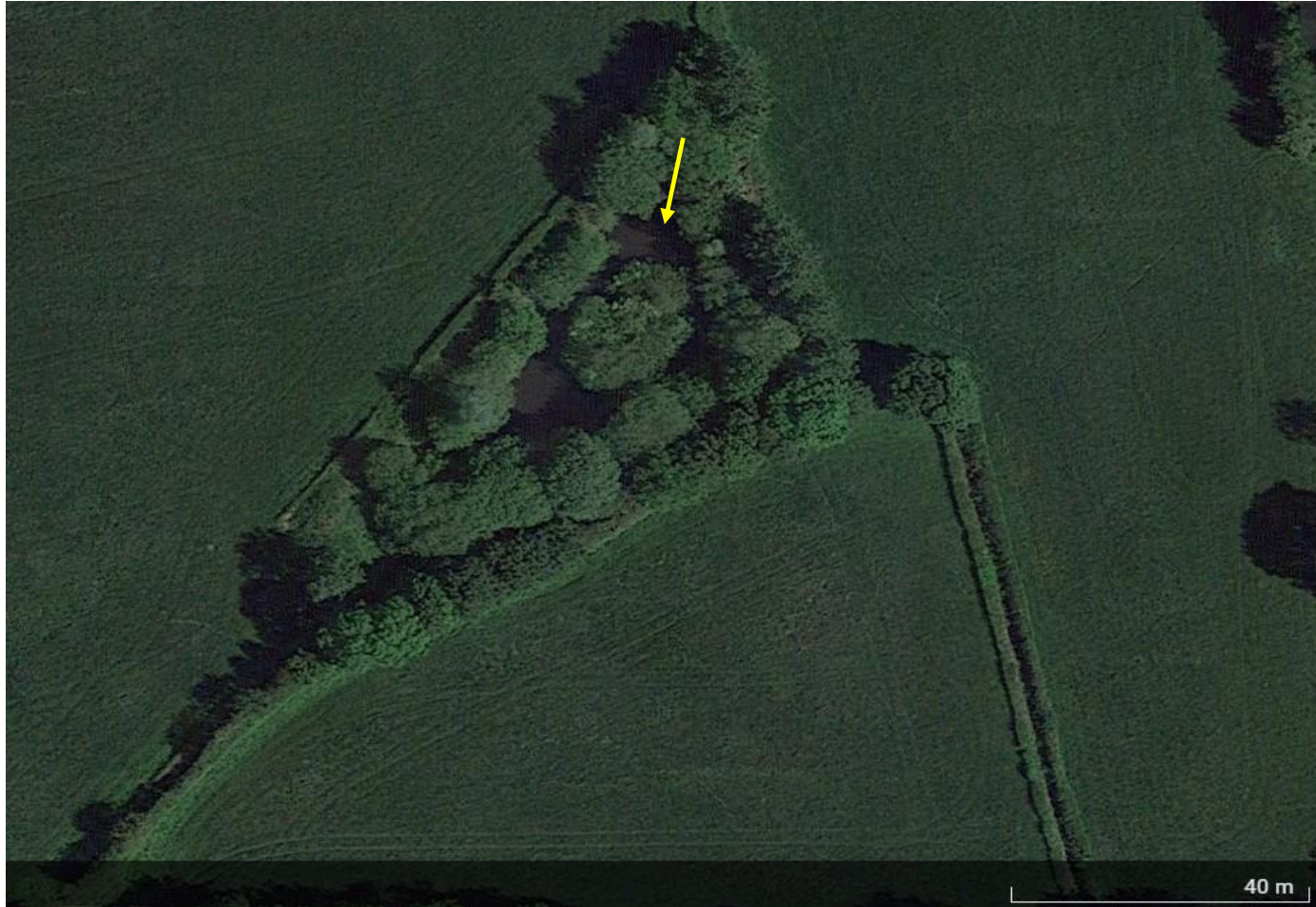
POND 7a Crossways Farm



PONDS 7b Meadow View



POND 8 Sunny Banks Farm



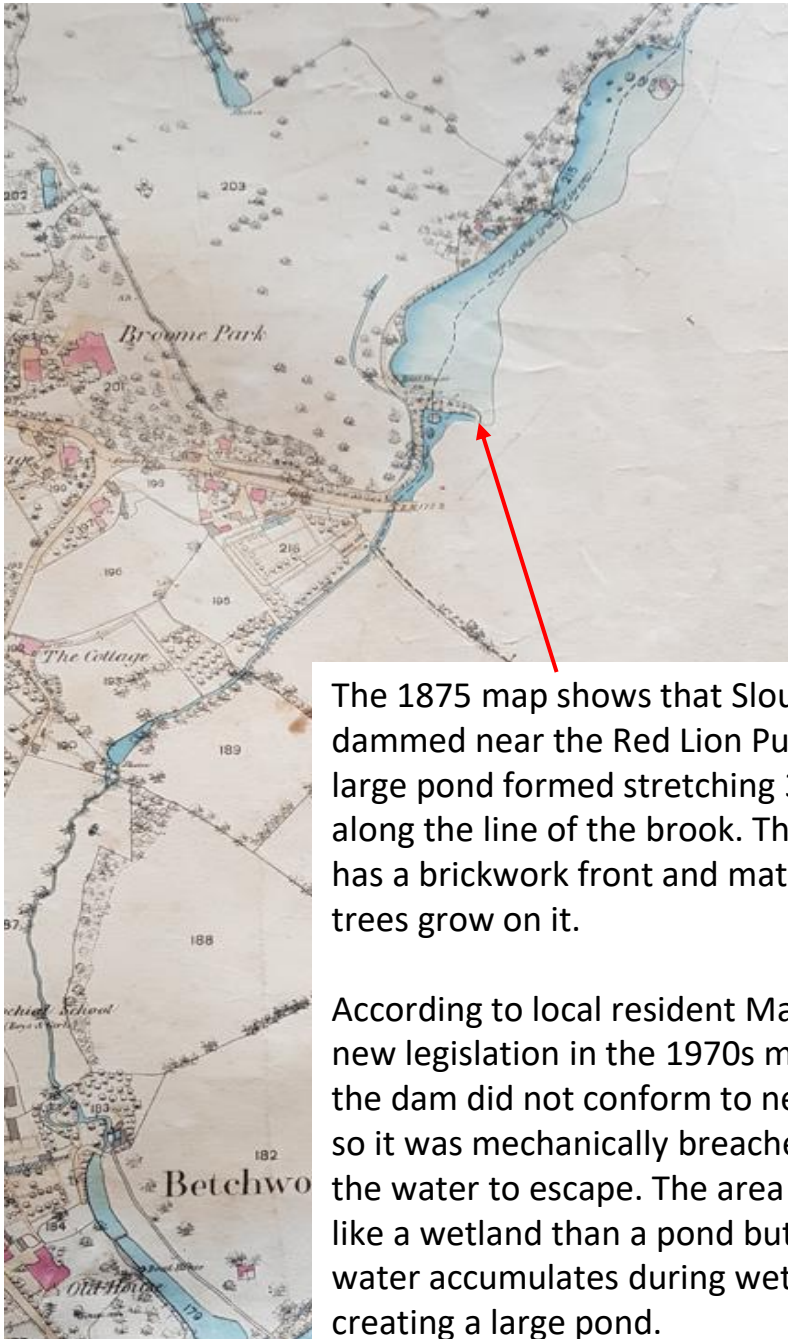
POND 9a New Pond Potters Farm



POND 9b Old north of Pond Potters Farm



Pond 10 'Old Fish Pond'



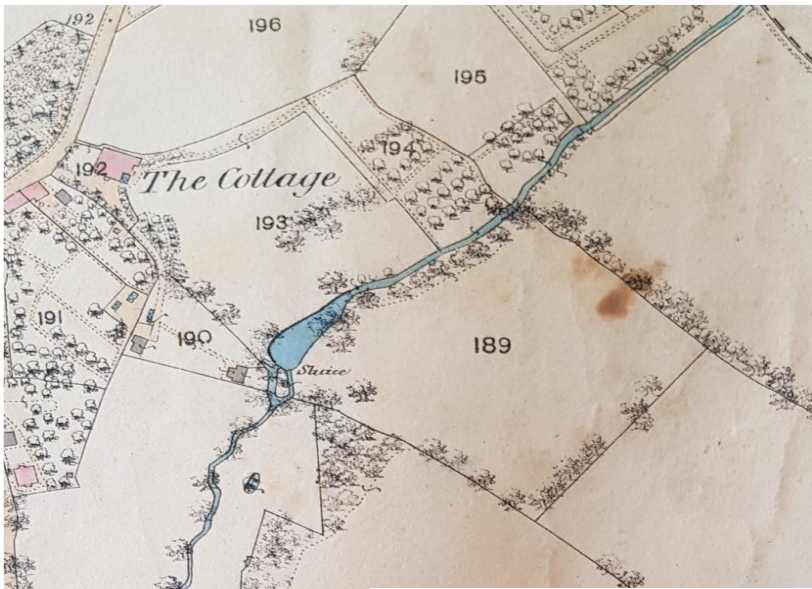
The 1875 map shows that Slough Brook is dammed near the Red Lion Pub and a large pond formed stretching 300m NE along the line of the brook. The earth dam has a brickwork front and mature Yew trees grow on it.

According to local resident Martin Higgins, new legislation in the 1970s meant that the dam did not conform to new standards so it was mechanically breached allowing the water to escape. The area is now more like a wetland than a pond but surface water accumulates during wet periods creating a large pond.

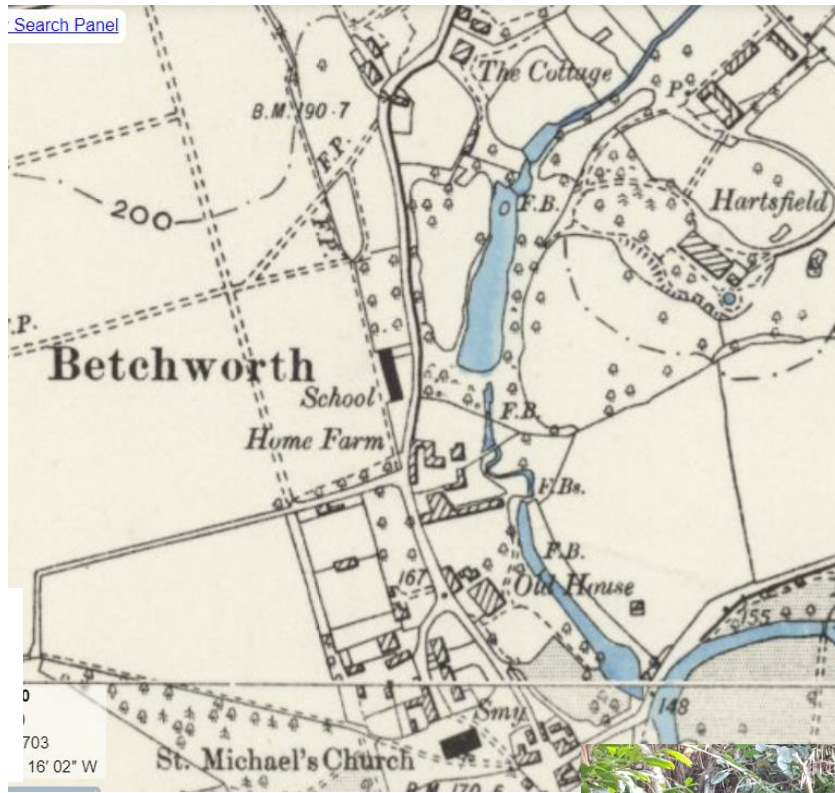


Pond 11 Betchworth Pond north





1875 map shows
Slough Brook running
between two ponds



1888-1913 map shows a second dam
that produced the north pond had been
constructed. The water from this pond
powered a small water wheel (below)



POND 12 Buckland Village Pond



The pond, which – bizarrely - is almost at the crest of the hill, was naturally supplied by a spring at the junction of the Gault Clay and Lower Greensand. From the 1930s until 1968, the pond was often dry, which was considered to be due to the fall in the natural water table from the quarrying of Park Pit, about quarter of a mile to the south. In 1939, 6 yards of puddled clay was put in to repair the pond. After having leaked again in 1949, the discussion was to either get someone to pay for the repair of the pond or failing that, to proceed with filling it in -obtaining as much suitable material as possible free of expense. Mrs Coulson, the headmistress, offered £150, and others followed to save the pond (reminisced in a Surrey Mirror article, 1963). Again in 1968, the pond was drained and was manually lined with clay, this time one-third of the funds came from each of the Estate, Dorking & Horley R.D.C. and from the Parish Council - the latter from local fundraising events. (Gregory 1970). During droughts in the 1990s, tankers full of water from the sandpit have kindly topped up the water level. It continues to be a struggle for the Parish Council to maintain this pond on top of a hill, not least due to the invasive pond-weeds which are ever present. The pond is actively managed by Reigate Area Conservation Volunteers (RACV) <http://www.racv.org.uk/buckland%20pond.html>

Lake 16 Tap Wood Lakes Buckland



Lake 17 Buckland Park Lake



<https://www.youtube.com/watch?v=ZF05DQMnEWo&t=9s>

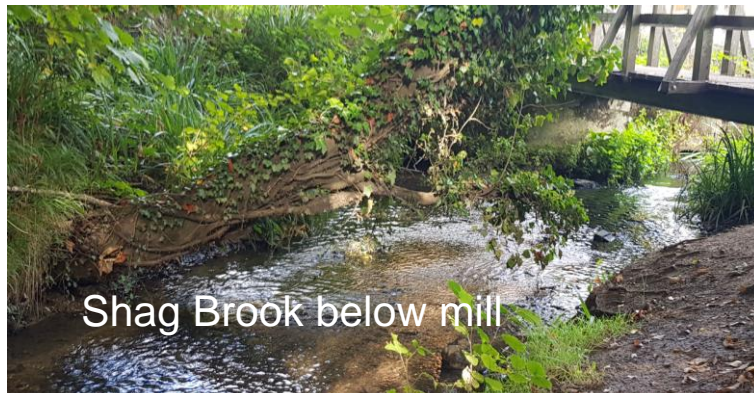
Pond 20 Betchworth Pond South





Pond 20 Wonham Manor

Pond 21 Wonham Mill Pond

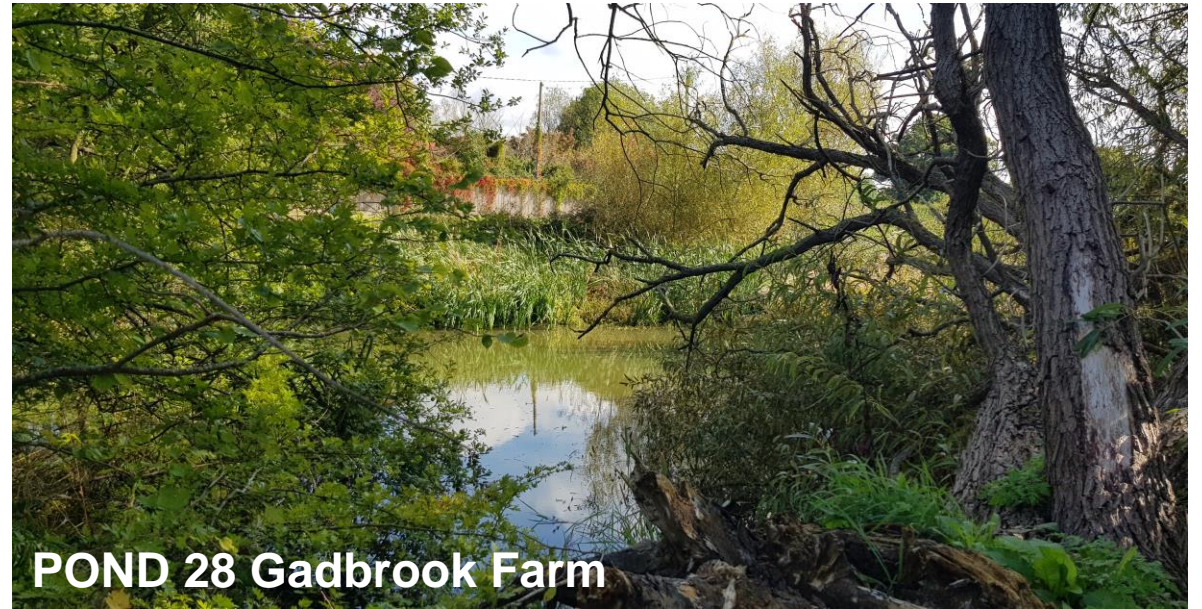




POND 26 Wheelers Lane



POND 28 Gadbrook Farm



POND 26 Wheelers Lane



POND 32 Weir with pond behind at Halls Farm

