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POND RESTORATION PROJECT UPDATE SURVEY FOR HOME FARM, PARHAM - JULY 2013

The following notes and photos summarise the pond situation as at 25th July 2013. This is too late in the year to assess for great crested newt as one might find larvae, but there are no eggs around still and these are easier to find.

With a droughty year and low water levels, it is currently a good year to consider pond restoration of any proposed ponds post harvest. Ideally spread spoil on nearest arable rather than have very fine organic matter be washed back into the pond at the first big rain. Ensure any machinery used on the Elm Tree Farm pond on the adjacent green is hosed down immaculately before it goes anywhere near your ponds to avoid any contamination with New Zealand pygmyweed.







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Pond 1 – Garden/arable edge – TM30839 62385 – est 250m2

November 2010: This linear pond is fairly shaded and full of organic matter, with its northern end just sticking out into the arable field edge to reach some sun but there is no buffer to the arable field edge. With a wildlife friendly garden to the south, this pond has potential for restoration if ruthlessly opened up to the south.

February 2012: A huge amount of coppicing work has successfully opened up the pond and revealed another gentle slope into the grass field adjacent.

25th July 2013: The pond is dry but there is evidence of lots of celery leaved crowfoot, white water speedwell, hairy willowherb and bittersweet where two years ago there was only willowherb.

- Leave all trees as now except perhaps the leaning young ash on the arable field edge.
- Consider treating some the scrub stumps with glyphosate to ensure they don't grow back immediately. Leave some cut logs as habitat piles.
- De-silt the pond, retaining any gentle underwater profile, spreading spoil on arable field post-harvest. Leave or take out and put back the occasional big log to create some underwater rotting wood and topography variation.
- Raise the level of the ditch at the out/overflow point to retain more water in the pond. You could use a spoil bank in the lowest point and/or put in a sluiceboard.
- Thereafter keep the pond open and sunny with regular, rotational coppicing/flailing of accessible edges.









Pond 4 – Big Brittles – TM3092 6282 – e300m2

November 2010: Dug by Bob Briscoe's father as a duck flighting pond, this large isolated pond was created at the junction of three hedges – only one ditch of which exists now. A scrub covered island (remnant hedge?) at the shallow western end partly divides the pond between the very dry (nettles) and shallow end and a rather deeper area to the east that still contains a puddle of water. I note on the Parham pond map that this holds water all year but I would suggest that the transpiration of all the scrub together with years or organic matter has all but dried up the pond now. As a stepping stone pond between the ponds to the east and to the west of the farm, this is an important link and restoring this, together with establishing a new hedge link, and some nearby scrub would be valuable.

February 20120: Unseen but check for outflow/overflows and ensure these won't unnecessarily lower the water levels.







25th July 2012: The pond has been opened up and is now holding a considerable amount of water at the deeper western end compared to a few years ago. A hedge has been planted to the east with a grass margin, which will link this otherwise quite isolated pond to the rest of the farm ponds which is excellent. There is quite a bit of blanketweed but fine-leaved pondweed (*Potamogeton berchtoldii*) has come in one one edge, together with creeping bent and hairy willowherb.

Whirligig beetles, ramshorn snail, mayfly nymphs and blue-tailed damselflies, four-spotted chaser and common darter dragonflies were observed.

- Coppice all pond margins and treat/remove stumps and island.
- Consider removing the remaining dead elm fell and leave some fallen wood in a couple of heaps as overwintering habitat piles.
- Remove organic matter, spreading spoil on arable field post harvest. Retain gentle margins all around as now.
- Thereafter keep pond open and sunny.
- Buffer pond with grass margins.



Pond 5 Little Meadow – TM3120 6275 – e120m2

November 2010: Evident on the old 1880s OS map, this is currently the best on the farm for wildlife and is the most likely to hold a small population of great crested newt. It is well located next to a mature hedge and glade with rough grass and young woodland nearby. However, it is full of leaf littler, shaded over 50% or so and pond sedge is starting to invade the open water. An emperor dragonfly was hunting around the pond, and pond dipping yielded water scorpion, freshwater shrimp, hoglice, water beetle sp, water measurer, and caddis fly larvae.

February 2012: Coppicing as opened the pond up and made it wonderfully open and a real feature.

25th July 2013: This pond was actually looking very dark with heavy shade being cast by the ash – and later in the day the tall pond sedge will probably cast shade from the south and west. It is also still full of leaf litter. Hoglice, midge larvae,





water boatmen, ramshorn snail and a few mayfly nymps and whirligig beetle were observed.

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- Remove organic matter, spreading spoil thinly over rough grass or even better over the hedge on the arable post harvest. Make sure the gentle banks are retained. Leave one clump of pond sedge at the margins but remember not to leave lots as it will simply encroach again very quickly in a small shallow pond.
- Consider keeping the roadside hedge section trimmed a little more.
- Thereafter keep pond open and sunny.



Pond 6 – Home Farm Yards - TM308623 – e 400m2



November 2010: This large, horseshoe-shaped pond 'wraps' around a small building and is surrounded on much of its margins by damson/thorn scrub. It has great potential next to the Home Farm drive to be a real landcape feature but part of it is rather murky, polluted and smelling due to fermenting grain being runoff from the adjacent barn. If this could be diverted, the pond could be cleaned up considerably and be an attractive feature for wildlife with North Green adjacent where dragonflies and other pond wildlife could feed.



February 2012: A huge amount of coppicing work has revealed the margins of the pond and it will be a real feature in the farmyard, and on the drive in. Excellent.



25th July 2013: The pond was looking amazing! You have continued to keep it open and it is really paying dividends! Several years ago it was almost inaccessible to survey and there were very few plants. However, today, even without any removal of organic matter, there are several submerged/floating-leaved plants covering 50-75% of the water body – broadleaved pondweed over 50%, curled pondweed over 20% and a few patches of fine-leaved pondweed (*Potamogeton trichoides* – nationally scarce) and stonewort (*Chara globularis*). The steep sides over much of the margin, and stony bottom on the remaining part mean there are few emergent plants. Water beetles, water boatmen, pea mussels, hoglice, ramshorn snails, mayfly nymph and smooth newt larvae were all recorded, together with azure and common blue damselflies, emperor, common darter and southern hawker dragonflies patrolling and battling over the pond.

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- Minimise any chance of spillages/pollution from farm building run off.
- Consider treating most inaccessible stumps with glyphosate otherwise leave occasional clump of scrub/bramble as now.
- I think you may get away without expensive removal of organic matter in all or most of the pond as pond plants appear to be rooting very healthily in whatever organic matter is there. If you have a digger on site doing the other ponds in the winter, try removing just organic matter accessible from the gently sloping part of the pond – this bit is still shaded rather from the lane shrubs.
- Thereafter keep pond open and sunny by regular, rotational coppicing or occasional flailing.
- Avoid the temptation to plant more trees near to the pond.
- Don't forget to pile the logs away from any building you might need planning permission on to encourage overwintering newts away from where there may be future conflicts.