

To: Chris Howard

From: Patrick Mannix

cc Jim Drummond (Shamley Green Environment Group), Pond Working Group, Owners of Pond Cottage and Dibdene

16th December 2020

WORKS ON THE SHAMLEY GREEN DUCK POND AND THE BRICKLAYERS POND

The management plan for the two ponds was outlined in my note of 8th July 2020, attached. In both cases it was proposed that a contractor be employed to carry out the immediate restoration work with the intention that annual maintenance thereafter would be carried out by volunteers. The determination to carry out annual maintenance is a key aspect of the programme, without that the benefits from the immediate works will be wasted, as in the past.

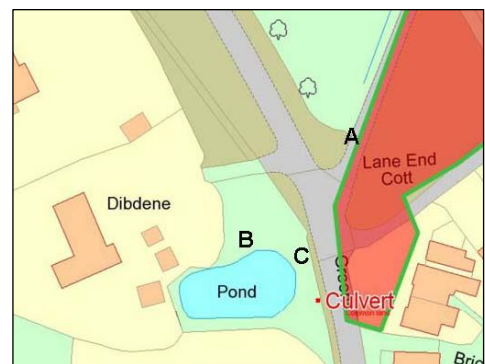
Duck Pond

The Duck Pond exit dam was repaired (£800 plus VAT) and subsequently several tons of very invasive *crassula* pond weed were removed. Because of the aggressive colonizing ability of the *crassula*, it is currently decomposing on site in a sealed pile. Work was also carried out on the surrounding vegetation. Further sensitive pruning of the larger weeping willow is to take place during the winter. The work was carried out by Ed Carpenter of Aquacraft in Ripley. The cost of the work subsequent to the repair of the dam was estimated at £4,000 plus VAT. So far £3,200 has been invoiced, which I have paid. Aquacraft have considerable expertise in pond management, including at Paper Court, Ripley. The work was well carried out and the site left in good condition.

Bricklayers Pond

The work on the Bricklayers Pond was estimated at £5,000 and has not yet been carried out. It is planned to carry out this work as soon as is practical and in particular before migrating amphibians are on their way back to the pond. The owners of both adjacent properties, Pond Cottage and Dibdene have been consulted and their requirements are met by the planned works. Pond Cottage require improvement of the access path on the boundary of the properties for hedge maintenance. Dibdene require a clear sight line from their exit drive to traffic approaching at speed from Church Hill. In the absence of definitive historical documents a practical location for the boundary between Dibdene and the pond site will be agreed at the time for control of the invasive bamboo.

Aquacraft have a window of opportunity to carry out the work in the first two weeks of January, which we need to take advantage of, before they are committed to larger jobs, including one at an SSSI, which have specific dates. Otherwise the work will be delayed until next winter. The references to Dibdene have been agreed with the owner.



Phase 1 – Trees and foliage

The bamboo will be cut initially to 3 feet from the edge of the pond. The bamboo will be cleared to ground level. With the assistance of the owner of Dibdene we can then investigate and agree a practical boundary line to which the cut area will be adjusted. With the agreement of the owner bamboo adjacent to the boundary will be topped at about 5 feet to reduce shading of the pond. Ed Carpenter recommends that regular cutting of the bamboo shoots in the cleared area will progressively weaken the root system. To prevent further incursion from Dibdene a slit trench adjacent to the boundary, to the depth of the root system, kept clear, should be sufficient.

Overgrown laurels are all rooted within Dibdene and will be cut to the boundary. They will quickly grow new foliage. A chipper and open truck for removal of wood and other chippings will be parked in area B. Some protection for the grass surface will be laid; but it is expected that the area will be damaged to some extent, the digger referred to below will be operating on the pond perimeter. Any damage will be repaired.

The two groups of alder adjacent to Pond Cottage will each be reduced to a single stem with the rest cut to re-grow as coppice. All other vegetation on the pond rim will be cut to re-grow as coppice to reduce shading.

Phase 2 – Reed mace

We will only remove 50% of the reed mace this winter, the rest to be done next winter. Material that can be accessed by a digger from the bank will be removed. This has the benefit of limiting disruption to the pond biosphere. Old wood chip material on the roadside edge of the pond will be removed.

The digger will be delivered by low loader at an early hour (6.30am?) to minimise traffic disruption. The vehicle will enter area A, the digger will be offloaded and driven across the road to area B. The low loader will be reversed onto Guildford Road. The digger will be on site for one day only and removed by a reverse operation.

The removed material will be piled in area C, giving wildlife an opportunity to return to the pond. A grab lorry from a waste disposal operator will be parked on the Guildford Road to collect the material; but this should take less than 30 minutes at a time of low traffic, directed by Stop/Go signs past the lorry.

Phase 3 – Pond Cottage access

There are options regarding the access path adjacent to Pond Cottage to be rebuilt at the request of Pond Cottage. The cut alder with alder stakes could be used to form an edge to the path, the latter to then be improved with imported hard core material/soil. Alternatively a board walk could be constructed with the alder used for piles. (Venice is constructed on alder piles!). A view is being sought from the owner of Pond Cottage.

MANAGEMENT OF SHAMLEY GREEN PONDS IN THE VICINITY OF THE GREEN – JULY 8TH 2020

*This proposal was agreed by the Shamley Green Pond Working Group** at an on-site meeting today. The following were among those consulted prior to reaching a conclusion: SWT (James Adler), NT (Nicky Scott), Gareth Matthes (author of GPM Ecology Report), Sean Harrison (formerly Woodland Advisor to the Surrey Hills), owners of Dibdene and Pond Cottage, neighbouring owners with significant ponds or other bodies of water.*

***At the time of writing the group currently comprises, Charlotte Gray, Claire Jenkinson, Phil Crickmay, Regena Coult and Patrick Mannix. The role of the Pond Working Group is to research the issues around pond management, including taking specialist advice where necessary and having done so make an informed recommendation on the objectives and management to the Environment Group/Civic Parish Council.*

The management objective is to ensure that both ponds (the Duck Pond and the Bricklayers Pond) contain water at a depth which precludes freezing to the bottom in winter or drying out in the summer when the inflow may be minimal. The water should be unpolluted. Aquatic and surrounding vegetation should not cause excessive shade or cover excessive water surface area. Vegetation should be managed for the benefit of the species we wish to attract to the pond. Very aggressive invasive vegetation, eg reed mace, should be carefully evaluated because of the annual work required to control.

It is suggested we consider two phases.

Phase 1 for each pond is to employ a knowledgeable pond/water body contractor* to contribute to ideas and planning and then to carry out the agreed programme to get the ponds into the above condition, so that subsequent annual maintenance after that can be carried out using local resources in the community. Phase 1 will involve significant volumes of material to be taken off site, beyond the resources of local volunteers. The work is to be planned and done now. The first annual maintenance to be completed next year, and then a survey carried out of all forms of wildlife to see what we have.

Phase 2 comprises annual maintenance of vegetation, regular wildlife surveys (invertebrates, insects, plants, birds) and any actions specific to attraction of wildlife.

BRICKLAYERS POND

Water: The water supply appears adequate; but the contractor would inspect the outflow control to see if this is adequate for the long term and not liable to leakage or erosion. The inflow also needs to be surveyed

Water Quality: The recent survey and previous surveys confirm there is no significant pollution.

Aquatic vegetation: Very overgrown. The plan for reduction and subsequent maintenance requires input from the contractor. Preferably very aggressive colonizers should be avoided. A band of dense vegetation adjacent to the edge is a useful deterrent to dogs or children. Moorhens may nest on the margin for which allowance should be made.

Any specific planting to attract species should take place after Phase 1, once we have confirmed that successful annual management is in place and assessed what wildlife has been attracted.

Other Surrounding vegetation: Pond Cottage needs access for cutting of their yew hedge. The access path on that side of the pond needs improving to provide a stable surface to work from. The improved path should be extended to give access to the outflow, for inspection and maintenance.

Bamboo from Dibdene is a problem, which again needs expert advice from the contractor. Ideally on the pond side of the boundary with Dibdene the bamboo should be dug out and a barrier installed to prevent ongoing infestation. The boundary with Dibdene where there is no wall or other boundary marker needs to be defined and agreed. The Civic Parish Council are obtaining the available plans.

Expert advice is needed on reduction and maintenance of other surrounding vegetation. The objective is that once the initial work is done annual maintenance is within the capabilities of local volunteers. However birds take advantage of the vegetation, this must be taken into account.

The environmental report recommended the wood chip bank between the pond and the road should be removed, as it will contribute to unwanted nutrients in the pond. That area should then be allowed to grow and not mowed as part of the grass commons. It provides a screen for the pond and deters casual entry by dogs or children. Except that Dibdene have requested that it be cut at one end to maintain a sight line from the Dibdene exit drive to traffic coming (at speed) from Church Hill. This should not be a problem.

Wildlife: The recent environmental survey confirmed newts and frog tadpoles, it did not cover insects eg. dragonflies and damsel flies. There was comment on birds. Wildfowl, ducks and moorhens frequent the pond, the latter nesting. Regular surveys of all wildlife, plants and fungi should be recorded after Phase 1.

Access and seating: It is proposed that this pond should be left for wildlife, and visitors not encouraged. The road noise also does not make it an attractive location to sit.

DUCK POND

Management of the Duck Pond is mainly focused on the infestation of *Crassula* and duckweed. On investigation it turns out that the concern about spread of the former may be overstated. Neighbouring owners of bodies of water have been kept informed and have indicated acceptance of the approach suggested.

A 2014 report on over 500 ponds and water bodies in the New Forest concluded that the start of any infestation of *Crassula* is likely to have been the result of human activity, eg disposing of the contents of



an aquarium. The subsequent spread is by water channels and flooding to neighbouring water bodies and also by machinery used for removal of the weed. This coincides with our own experience and also that daily movement of wildfowl between our two ponds for a number of years has not resulted in and transfer of *Crassula* to the Bricklayers Pond.

Water: Following recent repair of the exit dam the water supply appears adequate; but we need advice from the contractor on any maintenance of the inflow and outflow ditches.

Water Quality: The recent survey and previous surveys confirm there is no significant pollution.

Aquatic vegetation: The main issue is the infestation of the pond by *Crassula* and duckweed. It is proposed that this is controlled by annual or twice yearly raking of the material and putting it on the island in the pond (following clearance of vegetation). Probably this can be undertaken by only two people. Hygiene procedures relating to cleaning of clothes and equipment will have to be followed to prevent risk of distribution of the weed.

Any specific planting to attract species should take place after Phase 1, once we have confirmed that successful annual management is in place and assessed what wildlife has been attracted.

Other surrounding vegetation: The surrounding bushes and brambles, which do have value for wildlife, need to be reduced as agreed with the contractor and then on an annual basis. The surrounding vegetation is also helpful in acting as a barrier for dogs.

The grass areas in the vicinity should be managed as part of the grass commons.

Wildlife: The recent environmental survey confirmed newts and frog and toad tadpoles, it did not cover insects eg. dragonflies and damsel flies. Wildfowl, ducks and moorhens frequent the pond. Ducks feature as part of the character of the Village in the Village Sign. Although they can be detrimental to some other wildlife in a pond, a small number of ducks are accepted and managed by controlled feeding. They may nest elsewhere in the area. Regular surveys of all wildlife, plants and fungi should be recorded after Phase 1

Access and seating: The existing seat should be retained.

* A possible candidate is Ed Carpenter,

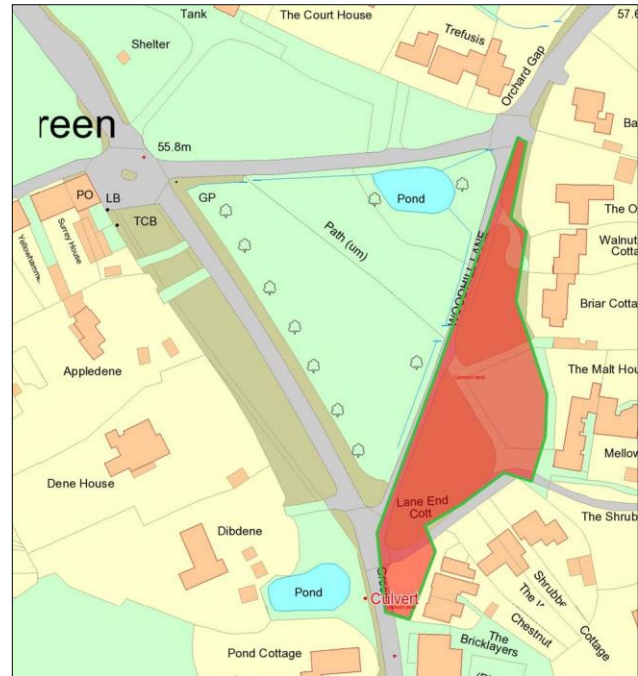
Phil Crickmay, Regena Coult, Charlotte Gray, Claire Jenkinson, Patrick Mannix
Shamley Green Pond Working Group
8 July 2020

History

In 1900 there were four ponds in the vicinity of the Green. Two were filled-in in 1948 as part of the “tidying up” after the War, one was outside the Old Malt House and the other at the entrance to Hulmead.

The two remaining ponds are the Duck Pond, the upper one on the map, and the Bricklayers Pond. The latter was in a typical location to benefit horses on an exit route from the Village and opposite the stables associated with the Bricklayers inn.

There is a further pond on Long Common, which is now privately owned. This pond is said to have a brick base to allow carts to be taken into the pond to wet the timbers of the wheels in dry weather.



GPM Ecology Report

There is a report commissioned by the Civic Parish Council (Blackheath, Shamley Green and Wonerth) by GPM Ecology. Unfortunately the report contains a number of errors and inconsistencies. The report makes no reference to insects, including dragonflies and damsel flies. It also make no reference to management of adjacent vegetation. However on 30th June PAVM had a productive meeting on site with Gareth Matthes, the author of the GMT report. The pertinent sections of the report are in the shaded sections below

DUCK POND - GPM ECOLOGY REPORT

Habitat Assessment. The pond was within open semi-improved grassland, with willow *Salix-Rubus* bramble scrub along the southern banks, road along the north side and a mature willow tree just east of the pond. The pond supported New Zealand Stone-crop *Crassula helmsii*, with a 100% cover across the pond surface. Native flora, such as marsh marigold *Caltha palustris* and willowherb *Epilobium* spp. had less than 1% cover across the pond, with a duck-house and willow-scrub on an island in the centre of the pond. The pond has an inflow and outflow, with pendulous sedge *Carex pendula*, rushes *Juncus* spp. and water-cress *Nasturtium officinale* growing in the outflow ditch.

Amphibian Survey. Smooth newts and frog and toad tadpoles. Habitat Suitability Index score was ‘Good’ (0.73), this measure relates to support great crested newts.

Breeding birds. A pair of nuthatches *Sitta europaea* were territorial around the willow tree adjacent to the pond, fending-off tits and great-spotted woodpecker *Denrocopos major*. Mallard *Anas platyrhynchos* with 16 ducklings observed. Moorhen *Gallinula chloropus* was also observed but breeding could not be confirmed.

Recommendations. This pond supports New Zealand Stonecrop *Crassula helmsii* (a Wildlife and Countryside Schedule 9 non-native species), the management of which requires careful consideration. It has been present in the UK since 1968. It is most widespread in Surrey. It is extremely prolific and there is no proven acceptable method of control. It can regenerate on land or in a pond from very small fragments. Successful elimination typically takes the form of filling the pond in! Any equipment used in managing the pond should be carefully cleaned, away from water bodies.

Ducks should not be encouraged at this pond, as wildfowl will encourage the spread of stonecrop to other ponds. [This is for discussion.]

BRICKLAYERS POND - GPM ECOLOGY REPORT

Habitat Assessment. This pond is located on the roadside opposite Bricklayers Arm, with two gardens directly on the western boundary and a narrow road verge to the east. A yew-hedge *Taxus baccata* and wall is located along the southern boundary and laurel *Prunus laurocerasus* with a mature lime *Tilia* spp. tree. Alder *Alnus glutinosa*, elder *Sambucus nigra* and bramble grew on the eastern boundary having recently been felled, with wood-chip covering the bankside. The pond margin supported rushes, with water mint *Mentha aquatica*, reedmace *Typha latifolia* and bur-reed *Sparganium* spp. An outfall was located in the south-west corner of the pond.

Amphibian Survey. The pond appears to support a small-sized population of smooth newts and toad tadpoles. No great crested newts (GCN) were observed but the Habitat Suitability Index score was 'Excellent' (0.84).

Breeding Birds. This pond had a great diversity of birds using and breeding in the vicinity of the pond, with a pair of greenfinch *Carduelis chloris* and wren *Troglodytes troglodytes* holding territories around the pond. A moorhen bred on the pond and several mallard ducks were present (but not breeding) at the time of the survey. Blackcap *Sylvia atricapilla*, tits and other small birds came to the pond more readily than Pond 1 (which is more open) to feed and drink, as there was good shrubbery cover around this pond. No BOCC red-listed birds were observed.

Recommendations. Although *Crassula* was not observed in this pond at the time of the survey, it is likely to be present and the above recommendations should be considered when conducting any management of this pond. The following actions should be considered.

Scrub around the pond had been coppiced with chippings spread across the bankside. While it is recommended that shrubs are coppiced on a regular basis all chippings should be chipped and removed offsite. If the chippings are left *in situ* they will leach nutrients into the pond.

Aquatic plants had recently been removed and as reedmace can grow several feet in a year, it is recommended that the pond is cleared of some macrophytes on a biannual or annual basis keeping plant cover to a maximum of 20-30% cover across the pond. This could potentially be carried-out by hand, using local volunteers, with vegetation left to breakdown on the road verge just north of the pond. Although wood-chippings should not be left nearby to the pond, it is recommended that macrophyte vegetation is left nearby, at least initially, to allow aquatic life to return to the pond.

The outflow in the south-west corner of the pond should be kept clear of vegetation and a cofferdam could be created around the outfall to maintain a higher water level.

The removal of cherry-laurel and bamboo on the north-west boundary with the property at Dibdene would benefit the biodiversity of the pond, if they were replaced with an alternative native hedge (such as a yew-hedge).

Management of Ducks

The Village sign was created about 40 years ago. The designer sought things that reflected the Village, he decided on cricket and ducks, see below. If you want an ideal natural pond with the greatest variety of aquatic species, ducks may damage that. However the GPM Ecology Report of the Duck Pond shows that the newts and frog and toad tadpoles are not being deterred by the ducks or the *Crassula*. Ducks are part of Shamley Green.

