



first
environment
limited

Ecology

Preliminary Ecological Appraisal:

The first stage of ecological assessment consists of a Preliminary Ecological Appraisal (PEA). The aim of this survey and report is to identify the potential impacts on protected and notable species from proposed works at the Site. This consists of identifying and analysing the habitats onsite, including their potential to support protected and notable species. The survey also includes a protected species scoping assessment, which involves looking for presence and/or signs of protected and notable species.

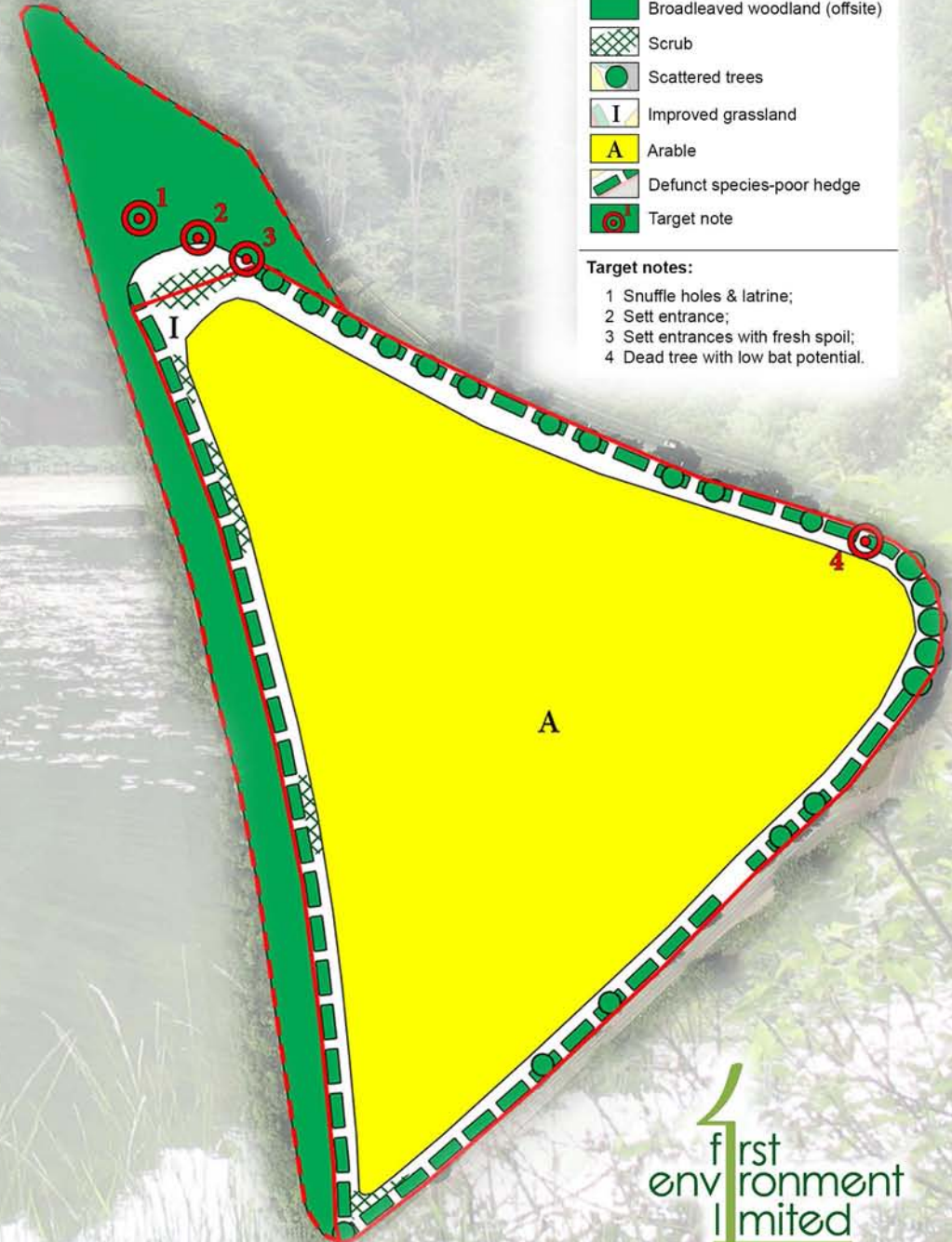
A report will be produced containing the findings of the PEA. This report will include any recommendations for additional surveys, as well as an initial outline of the impacts the proposed development might have and mitigation measures that may be required to offset these effects.

In some cases, no further surveys are required. However, if the PEA has identified potential for protected or notable species, the second stage of the ecological assessment will consist of further surveys. These could include detailed botanical surveys, bat, Badger, nesting bird, Dormouse, Great Crested Newt, reptiles, Otter and Water Vole.



Target notes:

- 1 Snuffle holes & latrine;
- 2 Sett entrance;
- 3 Sett entrances with fresh spoil;
- 4 Dead tree with low bat potential.



Further Surveys:



Often the need for further surveys is identified in the Preliminary Ecological Appraisal, if potential for or signs of a protected / notable species are found. These further surveys will help confirm whether such species are present on the Site, and gain an estimate of the population size. This will be used to inform what mitigation measures are required before, during and after development, if any.

The survey effort required and timings of survey vary depending on the species being surveyed. See the First Environment Consultants Ltd Ecology Surveys Calendar for more information.



If a species is found to be present on the Site, a mitigation strategy may be the next stage required. This will be tailored to the particular site and population size in question.



Mitigation / Enhancements:

If a proposed development goes ahead and there are protected / notable species found to be present, a mitigation strategy may be required to prevent harm or disturbance to these species.

The strategy taken depends on the species. It is also tailored to the population size, in order to attain the most efficacious and cost-effective solution possible.

There are often different aspects to mitigation, including both prevention of physical harm / disturbance to species and ensuring there is no net loss of biodiversity and/or wildlife value of the Site.

For example: a population of reptiles may be translocated to a suitable nearby receptor site through a trapping exercise before works commence. This would involve erecting specially-designed reptile-proof fencing around the Site to prevent any reptiles returning. Reptiles would then be trapped within the Site and relocated to a pre-approved site. The fencing would then remain in place until all construction works are complete. This translocation aims to prevent harm to reptiles.

The NPPF guidance states that there should be a net gain in biodiversity and wildlife value wherever possible in order to achieve sustainable development. Therefore, enhancements may include measures such as provision of nesting boxes for birds and roosting boxes for bats. It may also include creation of cover and foraging habitat, for example through native planting such as wildflower meadows and hedgerows.



Mitigation / Enhancement Example:



Refugia will be created by forming piles of rocks and boulders of varying sizes, resulting in small gaps which will offer smaller fauna places to hide directly next to the pond.



Native trees planted near the pond will provide another layer to the structure of the habitat. They will offer nesting sites for birds, foraging opportunities to wildlife, and will increase native biodiversity. Furthermore they will add to the backdrop of the scene for viewers, filling in the existing gap in the higher vegetation. Bird and bat boxes can be installed onto trees to offer further nesting and roosting opportunities.

KEY	
	Proposed Tree
	Proposed Shrubs
	Proposed Specimen Shrub
	Proposed Wetland Planting
	Proposed Emergent Planting
	Proposed Floating Planting
	Proposed Woodland Meadow
	Proposed Wetland Meadow
	Proposed Pollen and Nectar Meadow



Variable pond depth will increase the structural complexity of the habitat, which in turn caters to the various requirements of different plant species. This enables higher plant species diversity, and thus attracts a broader range of invertebrates and other fauna.



Native shrubs will provide cover for wildlife near to the pond, offering a safe haven from passing predators. They will also increase biodiversity, as well as providing food sources to wildlife.

Three different meadow types will be planted to provide an assortment of habitats, including wetland, woodland, and pollen & nectar meadow. This also ensures that the planting is well suited to the different environments found around the pond: wet, shaded, and sunny.



A wooden viewing platform will provide a safe and accessible spot for enjoying the view of the pond, whilst also offering a place for wildlife to shelter under. A mown path through the woodland meadow will connect the viewing platform with the main garden and house.