Appendix 6 – County Ecologist Response

From: Levine, Cody

Sent: 21 October 2021 14:40

To: Aldridge, Steven

Subject: Lea Castle - Woodland and Dust Mitigation Measures

Follow Up Flag: Follow up Flag Status: Flagged

Hi Steve

Thank you for your email and apologies for the delay in responding. I've now had opportunity to review the summary of evidence and extracts offered by Mark Singlehurst and have also made enquiries with colleagues in Worcestershire Archives and Archaeology team to further investigate available evidence over-and-above our 1983 field survey undertaken by Worcestershire naturalist John Day, as was recorded in our local dataset 'the Ancient Woodland Catalogue'.

My colleagues have provided some interpretation of the additional evidence held in WCC's archives. This indicates that the three woodlands in question are likely to have been established by the early 19th century; despite a complicating factor of designed landscape features around Lea Castle Farm, the woodland's irregular shape (in contrast to the more regular-shaped field boundaries to the east around the new Lea Castle development) is indicative of a pattern of land use characterised during the medieval period and which persisted to the 17th century, where unenclosed land was converted to piecemeal enclosure and managed for arable or pastoral use, with marginal land subsequently managed as woodland or retained for unenclosed grazing. LIDAR imagery indicates a number of deeply incised trackways, with some limited quarrying within the northern part of the woodland; which is a pattern of woodland land use which I understand is consistent with many of our historic woodlands, including the Wyre Forest. Nevertheless, the additional evidence received doesn't appear to provide further corroboration of the existence of these three woodlands to a date any earlier than 1822 (Greenwood Map, RGS) and therefore, at this stage, I do not wish to contest the challenge presented by Mr Singlehurst as to the ancient woodland status of Wolverley Lodge or Reservoir Woods, and I am grateful for the due diligence in this matter.

The status of Wolverley Carr may be more complex to determine, carr being a wet woodland habitat which may well have been mapped as wetland or marsh in early maps, but equally may only have succeeded to a wet woodland community more recently. Nevertheless, I am content that the location of Wolverley Carr, at c.100m from the excavation site boundaries, and effectively sheltered by Wolveley Lodge and Reservoir Woods, means that damage or deterioration of that woodland from effects of mineral development is not considered to be of particular concern.

Turning then to the assessment of effects and impacts upon the two woodlands immediately adjacent to the site: Wolverley Lodge and Reservoir Wood. To be clear, if these woodland habitats were damaged or degraded by mineral operations, then I believe the associated opportunities for woodland fauna, and notably for dormice if present, to forage, seek shelter and potentially breed within these woodlands might also be affected.

The applicant has stated that there is no evidence dormouse are present within these woodlands, however only nut search and habitat assessments have been provided to date. Natural England's standing advice is clear that nut searches cannot, as a method, be used as evidence that dormice are absent from a site. The applicant has stated that "this project is not considered as a damaging project [for dormice], due to the areas of suitable habitat being retained" however the submitted Ecological Assessment identifies significant and negative impacts from noise, dust and light upon these woodlands, in the absence of mitigation measures. I believe that, even while tolerant to a degree of effects of disturbance, the significant degradation or deterioration of the woodland habitats will inevitably have an adverse

effect upon the associated woodland flora and fauna. Therefore, in order to support the supposition that any impacts arising from mineral operations upon dormice (if present) would fall below a threshold considered likely to require derogation licence, I believe that appropriate mitigation measures to control effects of mineral working to acceptable levels of impact will be required.

Proposed mitigation pertinent to the woodland areas includes a 10m fenced stand-off area (subject to recent discussions), phased operations including restoration of adjacent habitat in an early developmental phase, minimising material drop heights, and a number of other minor measures intended to suppress fugitive dust emission at origin, transport and on handling of materials, together with a dust monitoring programme. The development of a proposed Dust Mitigation Strategy (DMS) will give the Minerals Planning Authority assurance these measures will be implemented.

These measures, including the 10m stand-off zone protecting woodland, are broadly acceptable, albeit a narrower stand-off would be secured in comparison to that required to protect ancient woodland. I therefore strongly encourage that the DMS also ensures that fencing protecting stand-off zones around Wolverley Lodge and Reservoir Wood incorporate a semi-permeable barrier, such as fine-gauge netting, as a further best practice measure to reduce or eliminate fugitive dust deposition on both the two woodlands and their grassy stand-off zones.

Doing so would provide several benefits: it will contribute in protecting the ecological functionality of the 10m grassy buffer zone, rather than compromising condition of this habitat as a 'sacrificial' buffer zone; dust netting would also contribute in the interception of light and to a lesser degree noise on the woodland's edge; and by doing so will provide the MPA with sufficient confidence that adverse effects of flora and fauna within the woodland will be minimised to acceptable and non-significant levels. The regular monitoring programmes proposed should include Reservoir Wood and Wolverley Lodge as monitored ecological receptors, and provide clear thresholds for intervention measures if further control of fugitive dust, noise and/or light pollution is subsequently identified as being required. Given the ten year period of site operation and restoration it may also be prudent to undertake periodic ecological update surveys for mobile species both within the site boundaries and also within Reservoir Wood and Wolverley Lodge.

If the applicant is content, these measures could be amongst those specified through the forthcoming DMS, and the success of these measures evaluated through ongoing site monitoring, to be programmed through the DMS and/or Ecological Management Strategy, implementation of which can be secured through suitably worded condition.

I hope you find the comments of help. Regards Cody

Cody Levine M.Sc C.Ecol C.Env MCIEEM

Team Leader - Ecology
Directorate of Economy & Infrastructure
Worcestershire County Council
County Hall, Spetchley Road, Worcester, WR5 2NP

Tel: 01905 843456 **Mob:** 07940 722535

Web: www.worcestershire.gov.uk/ecology Email: clevine@worcestershire.gov.uk

