Summary of Nenthead Ecology Surveys 2022

Ecology Survey	Survey Scope	Date	Summary of Results
Phase 1 Habitat survey	Phase 1 Habitat survey in accordance with standard JNCC (2010) methodology of all land within and adjacent to the Site boundary.	April 2022	Mosaic of interesting plant communities identified including calaminarian grassland on former mine workings. Update to previous survey reaffirmed findings of 2018 Phase 1 habitat survey.
Botanical Survey	National Vegetation Classification (NVC) survey.	August 2022	Unimproved acid grassland – dominant habitat within Site boundary. Unimproved calcareous grassland (UK Priority S41 Habitat) – occurs as short grassland turf on areas where the limestone geology comes near to the surface. Calaminarian grassland (UK Priority S41 Habitat) – associated with areas of historic mine disturbance and spoil deposits, and around car park. Marsh/ marshy grassland – small areas of rush dominant vegetation within the acid grassland where surface water run-off is naturally channelled. Acid/ neutral flush (UK Priority S41 Habitat) – abundant bog-mosses, hare's foot cotton grass, heather and crowberry present in one small area of that surveyed.
Breeding birds	Five walked transects; four of which commenced at sunrise to identify black grouse lekking behaviour.	April – June 2022	None of the bird species cited in the North Pennine Moors Special Protection Area (SPA) were recorded as breeding, and so the land in the survey area is not currently in use by these species, and the habitats are not 'functionally linked' to the SPA. The relevant species are hen harrier (Circus cyaneus), merlin (Falco columbarius), peregrine (Falco peregrinus) and golden plover (Pluvialis apricaria). This reaffirmed the findings of the 2018 breeding bird survey. No black grouse observed. Forty species recorded in total – 9 confirmed breeding, 16 probably breeding, 11 possibly breeding, 4 non-breeding. The confirmed breeding species were Red grouse, Oystercatcher, Curlew, Great tit, Willow warbler, Blackbird, Robin, Dipper, Meadow pipit. The survey area is considered to be of local ecological importance. Breeding birds are of local ecological importance but the proposed development is not considered likely to cause significant impacts.
Great Crested Newt (GCN)	eDNA presence/ absence survey of seven waterbodies.	June 2022	All survey samples returned negative results for GCN eDNA. This reaffirmed the findings of previous eDNA surveys undertaken at the Site in 2018/19.
Reptiles	Presence/ absence survey using artificial refugia.	May – August 2022	No reptiles recorded. This reaffirmed the findings of a reptile survey undertaken at the site in 2019. Anecdotal report that common lizard is present. There is also extensive suitable habitat for slow worm and adder. Precautionary assumption that all three species may be present based on habitat suitability.
Otter	Presence/ absence survey.	June/ July 2022	No field signs recorded. Transient/ passage otter presence assumed, as the species has been recorded on downstream sections of the Nent.
Water vole	Presence/ absence survey.	June/ July 2022	No field signs recorded. Species considered likely absent.
Red squirrel	Incidental observations during survey work.	Spring/ Summer 2022	Local residents report red squirrels are found in the woodland by Hilltop Cottages. Presence confirmed through observations of red squirrel in woodland close to car park.
Bats	No surveys undertaken to date.	N/A	The mine adits are potentially suitable for bat roosting, and there are records of bats using adits nearby. Further surveys to be undertaken when the Scheme is further defined, should there be potential for impacts on bat roosting habitats.