

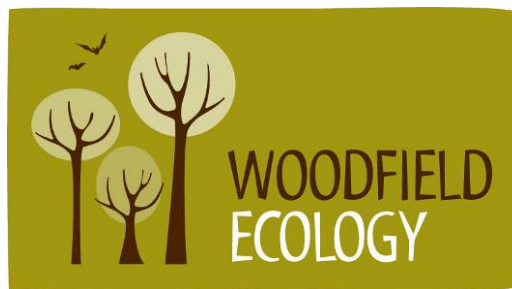
## Appendix 6.2

### Waye Lane Buckthorn Survey Report

# **LINHAY HILL QUARRY**

## **ENVIRONMENTAL STATEMENT - REGULATION 22 FURTHER INFORMATION**

### **BUCKTHORN SURVEY REPORT**



*On behalf of E & JW Glendinning Ltd.*

MARCH 2017

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## 1.0 INTRODUCTION

### 1.1 OVERVIEW

Woodfield Ecology was commissioned to carry out a Buckthorn *Rhamnus cathartica* survey on behalf of E&JW Glendinning Ltd. in response to the Linhay Hill Quarry Extension Environmental Statement (ES) Regulation 22 Request (Amec Foster Wheeler, December 2016).

The following report relates specifically to the request for the applicant to ‘provide results of the survey for Buckthorn along the hedgerow bordering Waye Lane’ (Item 20, Table 2.1: Regulation 22 Requests).

### 1.2 PRE-EXISTING SURVEY INFORMATION

The request for a Buckthorn survey stems from comments raised by a Mr J. Day (July, 2016) on behalf of The Caton Group as follows:

*“The species [Buckthorn] occurs within the application site. There are bushes along the proposed Waye Lane at the western extremity of WH6 and in the northern section of WH8...Both these hedges are threatened by the proposals....There is a strong possibility that the species could be more widespread in the hedge system associated with those areas on the limestone and within the quarry extension area. The extent and importance of the population within the application site has not been elucidated. There is no impact assessment or mitigation.”*

Buckthorn was not identified during any of the ecological surveys carried out within the proposed Extension Area or along the Waye Lane Replacement Route, either incidentally, or during the following targeted habitat surveys (which included an element of botanical assessment):

- Extension Area - Phase 1 Habitat Survey (April 2014 & update walkover March 2016);
- Extension Area – Hedgerow Assessment (April 2014);
- Waye Lane Replacement Route – Phase 1 Habitat Survey (January 2015 with confirmatory checks in April & June 2015); and
- Waye Lane Replacement Route – Hedgerow Assessment (January 2015 with confirmatory checks in April & June 2015).

However, it is acknowledged that methodologies used in relation to Phase 1 Habitat survey Hedgerow Regulations Assessments do not include a comprehensive assessment of plant communities, nor do they produce exhaustive botanical species lists. It was agreed, in consultation with the Dartmoor National Park Authority Ecologist at the time (N. Barker) that further targeted survey effort was therefore necessary.

### 1.3 CONSERVATION STATUS

Buckthorn is a native, deciduous, usually spiny shrub that grows to a height of up to 8m that occurs in hedgerows, scrub and open woods on peat and base-rich soils which is locally common in England (Stace, 2010).

Within Devon, Buckthorn is considered to be native and very rare (recorded in less than 10 tetrads since 1986). The most recent records (dating from 2008 onwards) are confined to limestone on Kerswell Down and the neighbouring Whilborough Common near Kingskerswell (Smith, R. et. al, 2016).

Whilst Buckthorn is neither a legally protected nor a nationally notable species, it is a locally notable species and its presence would therefore require further consideration in line with local planning policy as set out within the Dartmoor National Park Core Strategy Development Plan Document (DPD) and the Dartmoor National Park Development Management and Delivery Development Plan Document (DMD).

### 1.4 SURVEY OBJECTIVES

In order to address the ES Regulation 22 Request, the purpose of this assessment was to confirm the presence or absence of Buckthorn along the Waye Lane Replacement Route. If found to be present, a valuation of the site for this feature would be carried out, together with an impact assessment, with recommendations made for mitigation and / or compensation measures as necessary.

## 2.0 METHODOLOGY

### 2.1 FIELD SURVEY

A survey to determine whether Buckthorn was present within hedges bounding / adjoining the Waye Lane Replacement Route was undertaken on 9<sup>th</sup> September 2016 by Becky Prudden BSc MCIEEM.

September is an optimal month to search for this species given that key identification features are apparent at that time of year, when the shrub is in full leaf and any fruits are conspicuous. The photograph below shows fruiting Buckthorn and was taken at a location in Hampshire during September 2016.



**Plate 1: Example of Buckthorn Shrub (Hampshire, September 2016)**

The survey involved a systematic search for Buckthorn within all hedges and woodland / scrub edges on 50m either side of the proposed centre-line of the Waye Lane Replacement Route. Additional survey effort was used in the two hedge locations previously highlighted by J. Day (WH6 and WH8) as supporting this species.

In conjunction with the survey and to ensure there was no possibility of specimens being missed or misidentified, verification of the survey findings was also sought from Mr J. Day, in consultation with the Dartmoor National Park Authority Ecologist at the time (N. Barker).

## 2.2 BASELINE EVALUATION CRITERIA

The ecological valuation is based on the guidelines set out in Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal (CIEEM, 2016). The known or potential value of an ecological resource or feature is determined within the following geographical context:

- International and European;
- National;
- Regional;
- County;
- Local.

## 2.3 LIMITATIONS

No significant limitations which could potentially reduce confidence in the findings were encountered whilst completing the survey. The surveyor is experienced at carrying out botanical assessments and through survey work undertaken elsewhere within the UK, has a high level of familiarity with the plant species in question.

### 3.0 RESULTS AND CONCLUSIONS

The survey did not record the presence of Buckthorn, including within either of the two hedge locations where Mr J. Day had previously indicated possible presence (Day, J., 2016).

In order to verify these findings, Mr. J. Day was invited to attend a site meeting to point out the shrub specimens in question. Subsequent to that, Mr. J. Day carried out a further site visit, and confirmed that the shrubs previously considered to be Buckthorn were in fact an apple *Malus sp.* (refer to Appendix A for details of correspondence).

Based on these conclusions and the absence of Buckthorn recorded during the survey, the site is considered to be of **negligible** value for this species currently and as no impacts are predicted, there is no requirement for mitigation and / or compensation.

In the very unlikely event that Buckthorn colonises the site in the future, this will be detected through routine monitoring of the hedgerow network, as set out within the Outline Ecological Mitigation & Enhancement Strategy (EMES).



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## REFERENCES

CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Dartmoor National Park Authority (2008), Local Development Framework Core Strategy Development Plan Document 2006 -2026 Adopted Version. Dartmoor National Park Authority.

Dartmoor National Park Authority (2013) Dartmoor National Park Development Management and Delivery DPD, Dartmoor National Park Authority.

Day, J., (2016) Linhay Hill Quarry Extension and Associated Works – Dartmoor National Park, Planning Application No: 0322/16 – Ecological Statement. Commissioned by The Caton Group.

Smith, R., Hodgson, B. & Ison, J. (2016) A New Flora of Devon. The Devonshire Association for the Advancement of Science, Literature and the Arts, Exeter.

Stace, C., (2010) New Flora of the British Isles, Third Edition. Cambridge University Press.

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## APPENDIX A: CORRESPONDENCE WITH MR J. DAY

**From:** [JOHN DAY](#)  
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**Cc:** [nbarker@dartmoor.gov.uk](mailto:nbarker@dartmoor.gov.uk)  
**Subject:** Buckthorn  
**Date:** Wednesday, September 28, 2016 8:59:43 AM

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Hello Ollie



I have now compared material from my two bushes of "Rhamnus" from Waye Lane with a known plant. I can confirm that neither of my two bushes is *Rhamnus catharticus*. Both are the same and are an apple, *Malus*. My apologies. Your photos, which appear to show one of the bushes in question, do of course confirm *Malus*.

Although the plants do bear a close resemblance to Crab Apple, *Malus sylvestris*, under the current species conception in Britain they are far too hairy to be *M sylvestris* and under these circumstances it would be normal to determine the plants as *Malus pumila*. However in this case the gross morphology seems so close to genuine Crab Apple that probably the best name on offer would be the aggregate Apple, *Malus sylvestris sensu lato*. (There is a good account of the current state of play on *Malus* in *Stace et al Hybrid Flora of the British Isles, BSBI 2015*.)

Regards  
John

## DOCUMENT CONTROL INFORMATION

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**CLIENT:** E & JW Glendinning Ltd.  
**REPORT TITLE:** Buckthorn Survey Report  
**ISSUE DATE:** March 2017

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### REVISIONS:

Rev No.	Comments	Date

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