

Site:	Tom Nook Farm, Turton Road, Tottington, Lancashire, BL8 3QG
Date:	16 th May 2022
Client / Principle Contractor	AC & RJ Mackenzie
Grid Reference:	SD 758 141
Activity:	Drainage Ditch / Grassland survey
Ecologist:	Miranda Cowan, MCIEEM

Introduction

Miranda Cowan Ecology Ltd. were appointed by AC & RJ Mackenzie to assess the habitat value of a drainage ditch with grass embankments located within the curtilage of Tom Nook Farm, Turton Road, Tottington, Lancashire, BL8 3QG.

The drainage ditch is to be part infilled along a 100m section for the purpose of improvement to agricultural access. As such, Lancashire County Council (LCC) have requested that the ditch is assessed for its it's potential to support any protected and notable riparian flora and fauna.

The survey was undertaken on the 6th May 2022 by Miranda Cowan BSc (Hons), PGCert FdSc, MCIEEM (Bat Class licence WML – CL17-2021-52426). Weather conditions during the week leading up to the survey and during the survey itself had remain consistently dry.

Figure 1: Survey Location



Methods

Habitats were characterised using the UKHab classification system¹, and their condition was assessed according to published technical guidance to inform Biodiversity Net Gain assessments². The value and sensitivity of ecological features were determined based on the guidance given by the Chartered Institute of Ecology and Environmental Management (CIEEM) (2018)³.

Any evidence of protected species or groups encountered during the survey was recorded⁴. This included observation of field signs and an assessment of the suitability of the habitats present to support protected species. Any evidence for the presence of invasive non-native species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) was also recorded.

Each plant species was assigned DAFOR to reflect the abundance of plant species present. D: Dominant, A: Abundant, F: Frequent, O: Occasional, R: Rare.

Survey Findings

The drainage ditch is V-shaped with shallow sloping embankments. The main channel is no greater than 300mm wide and deep, with a dry silty substrate. There were no areas of open flowing water at the time of survey. A plastic culvert of c.500mm currently diverts water under Turton Road.

The channel was otherwise encroached with tall ruderal species (**Table 1**), namely common nettle, great willowherb, seedlings of Himalayan balsam and bramble scrub. Under UKHab classification the habitats are mixed scrub (h3h) and neutral grassland (g3c). These habitats alone and in combination do not support any rare / notable plant species and are otherwise reflective of a nutrient rich unmanaged habitat type of low ecological value.

No evidence of protected or notable fauna was recorded along the 100m length of drainage ditch. However, low-growing bramble has potential to accommodate nesting birds between March to August, inclusive.

¹ UK Habitat Classification Working Group (2018). UK Habitat Classification – Habitat Definitions V1.0.

² The Biodiversity Metric 3.0: Auditing and accounting for biodiversity: technical supplement part 1a (2021). Natural England Joint Publication JP039.

³ CIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.' Chartered Institute of Ecology and Environmental Management, Winchester.

⁴ Species listed under Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended); Schedules 2 and 4 of The Conservation of Habitats and Species Regulations 2017 (as amended); species of Principal Importance listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006; and species listed in Kirklees Biodiversity Action Plan.

Table 1: Floristic species list.

English	Latin	DAFOR
Bramble	<i>Rubus fruticosus</i> agg	F
Broadleaved dock	<i>Rumex obtusifolius</i>	O-F
Cleavers	<i>Galium aparine</i>	O-F
Cock's-foot	<i>Dactylis glomerata</i>	O
Common nettle	<i>Urtica dioica</i>	A
Common vetch	<i>Vicia sativa</i>	LO
Creeping buttercup	<i>Ranunculus repens</i>	O
Creeping thistle	<i>Cirsium arvense</i>	LO
Dandelion	<i>Taraxacum officinale</i>	LO
False oat-grass	<i>Arrhenatherum elatius</i>	LO
Field horsetail	<i>Equisetum arvense</i>	O-F
Great willowherb	<i>Epilobium hirsutum</i>	F-A
Himalayan balsam	<i>Impatiens glandulifera</i>	F
Lesser celandine	<i>Ranunculus ficaria</i>	O
Marsh thistle	<i>Cirsium palustre</i>	LO
Meadow fox-tail	<i>Alopecurus pratensis</i>	LO
Meadow vetchling	<i>Latharus pratensis</i>	R
Soft-rush	<i>Juncus effuses</i>	O
Willow species	<i>Salix</i> spp.	R

Conclusion and Recommendations

Himalayan balsam, a Schedule 9 invasive species of the Wildlife and Countryside Act (1981, as amended) is present as a frequent occurring species. The works, which may involve re-profiling the ditch using machinery may therefore present a risk to causing further spread of Himalayan balsam through plant fragments and seeds becoming embedded in machinery tyres. Himalayan balsam flowers and sets seed between June and October, with disturbance to explosive seeds being a high risk for causing further spread of this species.

The drainage ditch works should therefore take place outside of the months of June and October. Works planned for winter will be ideal as this season shall also avoid other ecological constraints such as breeding birds, which nest from March to August, inclusive. The bramble scrub provides suitable habitat for nesting birds.

Where works are planned in the breeding bird season and before June due to Himalayan balsam seed dispersal risk, a nesting bird check will be required 24hrs in advance of any vegetation removal. It is important to note that should an active nest be located, works will be delayed for up to 28days or longer, subject to all fledglings having vacated a nest.

Where no active nests are located the works can progress, although stands of Himalayan balsam will first require removal through the method of hand pulling. The roots of Himalayan balsam are very shallow and can easily be pulled from the soil. The pulled plant fragments should then be stockpiled at the top of the embankment to allow to dry and rot down. Providing there is no evidence of Himalayan balsam seeds, the plant can be buried.