



## ECOLOGY TECHNICAL NOTE

<b>PROJECT</b>	Land off Burn Road, Birchencliffe
<b>PLANNING REF.</b>	2024/61/90255/W & 2019/60/94051/W
<b>SUBJECT</b>	<b>INVASIVE NON-NATIVE SPECIES MANAGEMENT PLAN</b>
<b>DATE</b>	22 April 2024
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<b>ISSUED TO</b>	Marsden Contracting, Zerum, Heneghan Architecture

### INTRODUCTION

Knight Sky Ecology was commissioned to provide ecological consultancy services in relation to a housing development located off Burn Road, Huddersfield, HD3 3BT. The development received outline planning permission on 9<sup>th</sup> February 2021.

The production of an Invasive Non-native Species (INNS) Management Plan for Himalayan balsam *Impatiens glandulifera* is required in relation to reserved matters application no. 2024/61/90255/W and recommendations made within the relevant ecological documents submitted to the outline application (application no. 2019/60/94051/W) including the Ecological Impact Assessment (EclA) report (Brooks Ecological, 2020) and an EclA revalidation and update statement (Knight Sky Ecology, 2023).

### BACKGROUND AND LEGISLATION

Himalayan balsam is an annual plant (it germinates, flowers and sets seed before dying all in the same year. It can reach 2m in height and forms dense, continuous stands. It is particularly frequent along the banks of watercourses but can also establish in poorly draining, damp habitats. The plant produces 500-800 seeds, which can be propelled several metres from the parent plant by seed pods that are explosive to touch. The species out-competes native flora reducing the biodiversity of the area.

The species is listed on Schedule 9, Part II of the Wildlife and Countryside Act 1981 making it an offence Under Section 14 of the Act to plant or otherwise cause these species to grow in the wild. Any soil or plant material contaminated with these invasive plants are regarded as controlled waste. The Environmental Protection Act 1990 contains a number of legal provisions concerning such controlled waste. These create offences to do with the deposit, treating, keeping or disposing of controlled waste without a permit. The plants must be disposed of safely at a licensed landfill site according to the Environmental Protection Act (Duty of Care) Regulations 1991.



## INNS MANAGEMENT PLAN – METHODS

### FIELD SURVEY

Information of the presence of Himalayan balsam within the site was obtained from the Preliminary Ecological Appraisal report (Brooks Ecological, 2019) and EclA report (Brooks Ecological, 2020). However, these reports covered a wider site area and the field survey information contained within both reports is five years old. Therefore, an updated field survey is required prior to the commencement of any works. The INNS field survey is required to be undertaken by a suitably experienced ecologist to accurately map all areas in which Himalayan balsam is present so these locations can be defined on a map with the location(s) shared with the developer / contractor and a treatment plan (based on the below) can be formulated.

### TOOL BOX TALK

An Ecological Clerk of Works (ECoW) is to be appointed to oversee the wider biodiversity protection and management commitments required for the site and relating to the Construction Environmental Management Plan for Biodiversity (CEMP: Biodiversity) (Knight Sky Ecology, 2024a) and the Biodiversity Gain Plan (Knight Sky Ecology, 2024b). One of the responsibilities of the ECoW is to provide an INNS tool box talk to the relevant contractor to run through the location(s) of Himalayan balsam and the agreed treatment plan for the species.

### BIOSECURITY

The infested areas should be fenced off with a perimeter of at least 3-4 metres from the nearest plant and sign-posted to prevent access by unauthorised personnel.

### TREATMENT

In order to control Himalayan Balsam in-situ it must be prevented from producing seeds until the seed bank is exhausted (i.e. no viable seeds remain in the soil). Seed bank longevity is around two years. The existing plants can be killed relatively quickly by:

- **Hand Pulling.** This method is particularly useful for smaller stands of balsam. Hand pulling should ideally commence in late May / June when plants can be easily identified and they will not have set seed. The optimum time for control is when the Himalayan balsam is just starting to develop flowering buds. The plants should not be pulled when in seed (August to October). The whole plant must be uprooted.
- **Cutting or Mowing.** Cutting can be done before the flowering stage in June. Plants must be cut at ground level, below the lowest node. Any cuts above the lowest node will lead to regrowth and re-flowering. Cutting too early will promote greater seed production from the plants that re-grow.
- **Chemical Control.** Where access to pull / cut the plants is not possible, then the infestation can be sprayed with a Glyphosate-based herbicide. Spraying should be undertaken by an appropriately trained and licensed contractor. Chemical control is often most practical for high density stands of Himalayan balsam. Caution should always be taken where potential damage to surrounding vegetation may result from the use of herbicides, as glyphosate is a non-selective herbicide that will kill the plant and others around it. Use of a weed wiper or spot treatment with a hand lance can increase the selectivity of this herbicide (particularly useful in mixed stands). Fitting the hand lance with a guard can direct the spray to the target more accurately.



## **DISPOSAL**

All arisings must be left on site, but it is crucial to prevent them from re-growing or producing seed. With a small amount of Himalayan Balsam, it is best to leave plants in an exposed place where it is not in contact with the ground to dry out and die quickly. These plants may need to be scattered, rather than collected into piles for composting to allow the roots to dry out and quickly kill the plant.

If there are large amounts of waste plants, they can be left in piles to compost if they are securely covered with a tarpaulin to prevent re-growth.

## **CONTAMINATED SOIL / BURIAL**

Any material stripped from the infested area should be stored outside the active development area before mechanical and/or chemical treatment of any new growth within the effective window (May to July).

One option could be to bury soils containing seeds or fragments of plants that could regrow at a minimum depth of 2 metres on the site. This option requires strict adherence to *Treatment and disposal of invasive non-native plants: RPS 178 (Environment Agency, 2023)*<sup>1</sup>.

## **SHORT TO MEDIUM TERM MANAGEMENT**

The existing seed bank is short lived (approx. two years); therefore, two to four years of control action (taking place before plants set seed) should eradicate the species (if the burying option is not sought).

## **RESPONSIBLE PERSONS AND LINES OF COMMUNICATION**

The parties responsible for the delivery of the INNS Management Plan commitments are the site owner (Marsden Contracting), the construction contractor and a nominated Site Environmental Champion (as per the commitments made within the CEMP: Biodiversity (Knight Sky Ecology, 2024)).

## **REFERENCES**

Brooks Ecological (2019). Preliminary Ecological Appraisal. Burn Road, Huddersfield. September 2019.

Brooks Ecological (2020). Ecological Impact Assessment. Burn Road, Huddersfield. March 2020.

Knight Sky Ecology (2023). Land adjacent to Cliffe Farm, Burn Road, Birchencliffe, Ecological Impact Assessment – Revalidation and Update.

Knight Sky Ecology (2023). Land adjacent to Cliffe Farm, Burn Road, Birchencliffe, Ecological Impact Assessment – Revalidation and Update.

Knight Sky Ecology (2024a). Land off Burn Road, Birchencliffe. Construction Environmental Management Plan: Biodiversity.

Knight Sky Ecology (2024b). Land off Burn Road, Birchencliffe. Biodiversity Gain Plan.

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<sup>1</sup> <https://www.gov.uk/government/publications/treatment-and-disposal-of-invasive-non-native-plants-rps-178/treatment-and-disposal-of-invasive-non-native-plants-rps-178>