

Belcamp ,Malahide Road ,Dublin 17

Invasive Alien Species Report

For A Strategic Housing Development (SHD)

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1.0 Executive Summary

Dublin City Invasive Alien Species Action Plan 2016-2020

Many IAS (Invasive Alien Species) are now well established in Ireland. The speed and fluidity of their invasion and spread presents major difficulties for traditional forms of environmental management. A coordinated approach between a variety of public bodies and organisations is necessary to achieve targets. Some suggestions are given as to how this can be achieved. The fact that the Dublin Bay recently achieved UNESCO Biosphere status makes it all the more important that IAS are given high priority as they are a real and increasing threat to our biodiversity

The National Biodiversity Data Centre has prepared lists of High Impact and Medium Impact Invasive species in Ireland ,and this information was used as the basis on which site examination took place , the assessment listing also made reference to the most updated IAS of EU notification

Inspection of the lands along the Mayne River , fields ,hedgerows and woodland took place throughout the period May-September 2018—2020 , and was updated between June and October 2021 ,and spring 2022

Adjoining lands were also inspected as is good practice

This report will detail the survey, notes on identification, impacts ,legislation, biosecurity , management plan with control options .

2.0 Introduction

The purpose of this survey was to determine if any Invasive Alien Species were present on the lands or the ponds and river, thus to prepare a management plan if discovered and to also recommend Biosecurity Measures to be put in place to ensure that IAS are not introduced by accident to the lands

The site was examined for a range of Invasive species including the various forms of Japanese Knotweeds of which 4 species occur in Ireland Japanese Knotweed, Giant Knotweed, Hybrid Knotweed and Himalayan Knotweed , in addition the following species were checked for occurrence Gunnera , Himalayan Balsam, Giant Hogweed and Rhododendron .

Most of the wooded area has being unmaintained for a considerable period of time and some Invasive tree species ie Sycamore and Laurel have become established.

The Mayne River forms the boundary between the lands in Dublin City Council and Fingal County Council and it particularly important that the outflow from the site does not result in an IAS being discharged into the Unesco Biosphere .

3.0 Site Inspection

The entire site was examined throughout the period 2018—2022 both in summer and autumn to establish if any IAS (Invasive Alien Species) were present . Account was taken of National Biodiversity Data Center IAS lists and the 66 European Union species of Concern updated to 2019

- Fallopia japonica and hybrids, Fallopia sachalinensis and hybrids. Fallopia x bohemica , Gunnera tinctoria, Heracleum mantegazzianum , Impatiens glandulifera , Lysichiton americanus(listed 2019) Rhododendron ponticum
- The assessment has shown that the only Invasive species of High Impact as per lists of National Biodiversity Data Centre present was Heracleum mantegazzianum

5 young plants of Heracleum mantegazzianum were located on the southern side of the Mayne River within the administrative area of Fingal County Council , these were sprayed with the appropriate herbicide and monitored confirming die off later in the summer .

Some plants developed in the summer of 2021 and were treated with herbicide ,suggesting an upstream source of seed producing plants outside the redline of the application

As part of the ongoing biosecurity arrangements regular inspections are carried out of the area along the Mayne river each season for this and other IAS .

The other High Risk IAS species found was *Prunus laurocerasus* in the woodland area close to the walled garden, this non native evergreen causes significant negative impacts in woodlands due to the allelopathic chemicals released in the environment surrounding these plants resulting in adverse impacts on the growth of other tree species, as a result Laurel thrives and increases in height and mass to the detriment of native species .

It is recommended that this species is progressively eliminated from the woodlands and the resulting areas are used for new planting of predominately native species however consideration should be given to introduction of some Beech

None of the High-Risk Aquatic species incl *Elodea nuttallii* were found

Medium risk species growing in the woodlands along the valley area of the Mayne river and in the large block of woodland near Belcamp House was *Acer pseudoplatanus*, due to its tolerance of shade and high viable seed production allows rapid spread, shading out native species. It needs to be progressively removed

On drier parts of the site *Buddleia davidii* has come established, due to the large amount of viable seed produced each year, this plant can rapidly spread and conflict with native plants, in suitable ground conditions it can grow very quickly and shade out native plants. The seeds can germinate in walls and the strong root system can cause cracking of mortar and significant damage especially to Limestone Walls . An ongoing program of removal is in progress

In terms of medium risk aquatic species none of the following were found including *Crassula helmsii*, *Lagarosiphon major*, *Myriophyllum aquaticum* or *Spartina anglica*

In the low risk category both *Azolla filiculoides* and *Elodea Canadensis* were absent

Symphoricarpos albus a non –native species – Low risk has established surrounding the upper pond and has spread impacting on native vegetation .

During restoration of the pond it is intended to put in place measures to control and ultimately eliminate this invasive plant

It is important to implement a system of regular checks as IAS can spread from upstream locations during time of floods, also as areas of fields are disturbed and sub soil excavated, dormant roots of specific IAS may regrow due to favourable conditions

4.0 Legislation

European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 Of 2011): Regulations relevant to invasive species

Section 49. Prohibition on the introduction and dispersal of certain species

Section 50. Prohibition on dealing in and keeping certain species

Under Regulation 49(2) any person who plants ,disperses, allows or causes to disperse, spreads or otherwise causes to grow Japanese Knotweed or any of the other invasive plants listed in the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations ,2011 (S.I. No 477 Of 2011) shall be guilty of an offence

5.0 Biosecurity

It is important to ensure that Invasive Alien Species are not brought into a site by accident and the following measures need to be put in place

In context of this proposed development it is important to ensure that any topsoil if sourced off site is free of Invasive species especially Japanese Knotweed which is capable of growing from very small root sections .

Invasive species are also spread in sand and gravel and it is recommended that throughout the course of development that the site is monitored and if any suspect material is seen growing get it identified by an Invasive species

Specialist

Invasive species are often spread along streams corridors by seeds and roots , and it will be important to periodically check the areas surrounding the stream which flow through the site.

If suspect vegetation is found on site, contact should be made with an Invasive Alien Species Expert

Invasive Alien Species can be spread in winter floods along rivers from upstream locations and all areas downstream needs to be checked from late spring onwards

Conclusion

As outlined in this report several Invasive Alien Species were located on these lands and procedures to eliminate these plants have being outlined. Biosecurity and ensuring that IAS are not introduced to the site is of paramount importance and it is recommended that information relating to the identification of suspect species including photographs of IAS during summer and winter is retained in the site office.

In the event of any suspect material being observed on site, professional advice from an expert in IAS should be sought

The National Biodiversity Data Centre Co Waterford web site provides up to date information on risks by Invasive Alien Species and alerts of potential new threats.

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