

Invasive Species Report

St. Andrews Court, Dublin

February 2022

Ireland

Final Report - Not Confidential

Report Prepared For: Project Ref: ECOE21 015

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1. Introduction

EcoÉireann was commissioned by O'Donnell Tuomey and Dublin City Council to conduct an invasive species survey for St Andrews Court, Dublin, central grid reference O 16824 33815. The site is subject to an application for residential development.

The purpose of this report is to set out the results of the survey highlighting any relevant constraints and where necessary mitigation or management recommendations for the proposed development plan.

2. Legislation and Background

The primary domestic legislative instrument relating to invasive species within Ireland is the Wildlife Act and associated amendments. The requirements of the Wildlife Act are summarised below.

The Wildlife Act, 1976 in the Republic of Ireland covered many aspects of nature conservation but was enacted prior to most recent international instruments, as listed above. The Wildlife (Amendment) Act 2000 complements and strengthens the 1976 Act and provides a legal basis for Ireland to ratify CITES and implement the EC Wildlife Trade Regulations. It provides for control of international trade and holding, possession or domestic trade in specimens of species listed under those regulations (Shine, 2002) and includes "stronger protection for species and their habitats, including control of wildlife trade, introductions of alien species and a regulatory system for commercial shoot operations". The Wildlife Acts are the main basis for the protection of flora and fauna and the control of activities that may adversely affect their conservation. With regard to non-native species: it is prohibited, without licence,

- to release, wilfully cause to escape or transfer within the State for the purpose of
 establishment in the wild any species of wild animal or spawn and any wild bird or the eggs
 thereof;
- plant or otherwise cause to grow in a wild state in any place in the State any species of flora, or the flowers, roots, seeds or spores thereof.'

EU Regulation on Invasive Alien Species (IAS) Some of the core provisions of EU Regulation (1143/2014) which deal with, among other things, bringing into the territory of the Union, keeping, breeding, transporting and placing on the market, species included on the list of invasive alien species of Union concern (the 'Union list') came into force on the 3rd August, 2016. The list of IAS of Union Concern The first "Union list" of 37 species consisting of 23 animals and 14 plants came into force, following the publication of the Commission Implementing Regulation (2016/1141), in the Official Journal of the Union on the 14 July, 2016. The 'Union list' comprises species whose potential adverse impacts across the European Union are such that concerted action across Member States is required. A copy of the list of species included and controlled on this list is set out in Appendix A.

The EU Regulations are Transposed into Irish law under the European Communities (Natural Habitats) Regulations 1997 which state:

- 1) Save in accordance with a licence granted under paragraph (7), and subject to Regulation 74, a person shall be guilty of an offence if he or she has in his or her possession for sale, or for the purposes of breeding, reproduction or propagation, or offers or exposes for sale, transportation, distribution, introduction or release
 - a) an animal or plant listed in Part 1 or Part 2 of the Third Schedule,
 - b) anything from which an animal or plant referred to in subparagraph (a) can be reproduced or propagated, or
 - c) a vector material listed in Part 3 of the Third Schedule,

in any place in the State specified in the third column of the Third Schedule in relation to such an animal, plant or vector material.

- 2) Save in accordance with a licence granted under paragraph (7), a person shall be guilty of an offence if he or she imports or transports
 - a) an animal or plant listed in Part 1 or Part 2 of the Third Schedule,
 - b) anything from which an animal or plant referred to in Part 2 of the Third Schedule can be reproduced or propagated, or
 - c) a vector material listed in Part 3 of the Third Schedule,

Development operations without due consideration present a risk of causing to escape or transfer or grow in the wild certain controlled plants through movement of materials on and off site during construction or landscaping operations.

3. Guidance

This invasive species report has been prepared with reference to the following guidance;

- Species controlled through Regulations 49 and 50 of the European Communities (Birds and Natural Habitats Regulations (2011), Third Schedule.
- Species listed as being of union concern on the list of Invasive Alien Species of union concern.
- Species identified by invasive species Ireland as being non-native <u>Invasive Species Ireland</u>

4. Methodology

4.1 Site Visit

The information collected for this report, to assist the competent authority to screen the proposal for AA, was based on a single site visit carried out on the 25th November 2022. The site visit was undertaken in daylight hours only and comprised of a survey to set out an overview of the nature of the habitats present but specifically to complete a search of the site for species which are controlled as invasive non-native species under relevant legislative instruments or which are considered to be non-native.

Broad habitats were described in accordance with guidance Fossit (2000)¹ and species were identified using references including Rose (2006)².

4.2 Author's Qualifications and Expertise

This invasive species survey and report have been completed by John Thompson. John holds a bachelor's degree in environmental science, and a master's degree in ecological assessment. John is an experienced ecologist and has been a practicing ecologist for over 20 years. John has completed an extensive range of ecological assessments including surveys for and developing mitigation requirements with regard to invasive species throughout the U.K and Ireland.

5. Results

5.1 Broad Habitat Types Present

St Andrews Court is located within a highly urbanised location and most of the site comprises of an existing building which has fallen into some level of disrepair. The surrounding areas has very limited vegetative cover which is limited mainly to plants which are establishing in small borders or areas of earth surrounding the buildings. Images of the site are illustrated in photos 1 and 2 below.

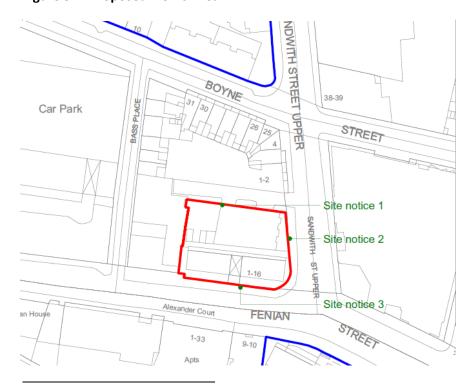


Figure 5.1. Proposed works Area

¹ Fosstit A. (2000). A Guide to Habitats In Ireland. The Heritage Council.

² Rose, F. (revised and updated by O'Reilly, C.) (2006). The Wild Flower Key: How to identify wild flowers, trees and shrubs in Britain and Ireland. Frederick Warne.

The site boundary is occupied by existing buildings and hardstanding. The existing buildings appear to be vacant and derelict. A small number of herbs and shrubs are present growing opportunistically where small borders and accumulations of earth or other growing medium are present.

There are no natural watercourses on the site and no waterbodies are present. The nature of existing conditions is illustrated in Photographs below.

No invasive faunal species of any kind were recorded on site throughout the course of the survey. Furthermore, habitats present were considered unsuitable for invasive faunal species.

Photo 1: Existing buildings present on site

Photo 2: Existing buildings and colonisation by Buddleija

Key Clontarf Castle Site Boundary PHIBSBOROUGH NORTH STRAND Dublin USHER'S ISLAND THE COOMBE T St Patrick's Cat O'Donnell + Tuomey ECOE21 015 Sandymount Strand St Andrews Court, Dublin Location of Proposed Development eco 0.75 1.5 km éireann

Figure 5.2. Location of Proposed Development Within the Greater Area

5.2 Species Present

Table 1 Below sets out a list of species recorded and identifies which species are 1; controlled under relevant legislation, 2; not subject to specific legal controls but which are considered non-native species. The Table also sets out some information of distribution and abundance of such plant species.

Table 1: Species recorded

Species	Latin Name	Controlled invasive species (regulations 49/50)	Union List of concern	Non- native species	Notes on Distribution and abundance.
Buddleja sp. (Butterfly bush)	<i>Buddleja</i> sp.	N	N	Υ	Present at the base of the main building along part of the site on Sandwith St upper and along the base of the building on Fenian Street in smaller quantities. Significant mature bushes are present adjacent to / with the site boundary on the western aspect towards bass place. Some appears to have established in gutters at roof level.
Common milkweed	Asclepias syriaca	N	N	Y	Small number of well-established plants with further growth / generation identified throughout the site.
Bramble	Rubus fruticosus	N	N	N	Establishing in amongst Buddleja scrub.
Creeping buttercup	Ranunculus repens	N	N	N	Establishing where small areas of earth are present in borders surrounding buildings.
St John's wort	Hypericum sp.	N	N	N	Occasional plants establishing in small areas in borders surrounding buildings.

6. Interpretation and Discussion

No species which are legally controlled under section 49 or 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 are present on site. Non-native species are however present which are typical of urban sites comprising of Buddleja and common milkweed. While these are known to host some value to biodiversity as a nectaring plant for pollinating species, Invasive Species Ireland acknowledges them as non-native.

While no strict legal controls are in place in relation to the species which are identified as being non-native the appointed contractor for the works should develop working methods during site clearance and construction which avoid the risk of spreading these species off site and similarly all plant arriving on site should be subject to suitable biosecurity protocols to prevent the introduction of other non-native species on to site during the construction phase.

Appendix A - Non-native species subject to restrictions under Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011.

Part 1: PLANTS

First column	Second column	Third column	
Common name	Scientific name	Geographical application	
American skunk-cabbage	Lysichiton americanus	Throughout the State	
A red alga	Grateloupia doryphora	Throughout the State	
Brazilian giant-rhubarb	Gunnera manicata	Throughout the State	
Broad-leaved rush	Juncus planifolius	Throughout the State	
Cape pondweed	Aponogeton distachyos	Throughout the State	
Cord-grasses	Spartina (all species and hybrids)	Throughout the State	
Curly waterweed	Lagarosiphon major	Throughout the State	
Dwarf eel-grass	Zostera japonica	Throughout the State	
Fanwort	Cabomba caroliniana	Throughout the State	
Floating pennywort	Hydrocotyle ranunculoides	Throughout the State	
Fringed water-lily	Nymphoides peltata	Throughout the State	
Giant hogweed	Heracleum mantegazzianum	Throughout the State	
Giant knotweed	Fallopia sachalinensis	Throughout the State	
Giant-rhubarb	Gunnera tinctoria	Throughout the State	
Giant salvinia	Salvinia molesta	Throughout the State	
Himalayan balsam	Impatiens glandulifera	Throughout the State	
Himalayan knotweed	Persicaria wallichii	Throughout the State	
Hottentot-fig	Carpobrotus edulis	Throughout the State	
Japanese knotweed	Fallopia japonica	Throughout the State	
Large-flowered waterweed	Egeria densa	Throughout the State	
Mile-a-minute weed	Persicaria perfoliata	Throughout the State	
New Zealand pigmyweed	Crassula helmsii	Throughout the State	
Parrot's feather	Myriophyllum aquaticum	Throughout the State	
Rhododendron	Rhododendron ponticum	Throughout the State	
Salmonberry	Rubus spectabilis	Throughout the State	
Sea-buckthorn	Hippophae rhamnoides	Throughout the State	
Spanish bluebell	Hyacinthoides hispanica	Throughout the State	
Three-cornered leek	Allium triquetrum	Throughout the State	
Wakame	Undaria pinnatifida	Throughout the State	
Water chestnut	Trapa natans	Throughout the State	
Water fern	Azolla filiculoides	Throughout the State	
Water lettuce	Pistia stratiotes	Throughout the State	
Water-primrose	Ludwigia (all species)	Throughout the State	
Waterweeds	Elodea (all species)	Throughout the State	
Wireweed	Sargassum muticum	Throughout the State	

Part 2: ANIMALS

A: animals to which Regulations 49 and 50 apply throughout the State or in particular places or categories of places.

First column	Second column	Third Column	
Common name	Scientific name	Geographical application	
A colonial sea squirt	Didemnum spp.	Throughout the State	
A colonial sea squirt	Perophora japonica	Throughout the State	
All freshwater crayfish species except the white-clawed crayfish	All freshwater crayfish species except Austropotamobius pallipes	Throughout the State	
American bullfrog	Rana catesbeiana	Throughout the State	
American mink	Neovison vison	Throughout the State	
American oyster drill	Urosalpinx cinerea	Throughout the State	
Asian oyster drill	Ceratostoma inornatum	Throughout the State	
Asian rapa whelk	Rapana venosa	Throughout the State	
Asian river clam	Corbicula fluminea	Throughout the State	
Bay barnacle	Balanus improvisus	Throughout the State	
Black rat	Rattus rattus	Offshore islands only	
Brown hare	Lepus europaeus	Throughout the State	
Brown rat	Rattus norvegicus	Offshore islands only	
Canada goose	Branta canadensis	Throughout the State	
Carp	Cyprinus carpio	Throughout the State	
Chinese mitten crab	Eriocheir sinensis	Throughout the State	
Chinese water deer	Hydropotes inermis	Throughout the State	
Chub	Leuciscus cephalus	Throughout the State	
Common toad	Bufo bufo	Throughout the State	
Coypu	Myocastor coypus	Throughout the State	
Dace	Leuciscus leuciscus	Throughout the State	
Freshwater shrimp	Dikerogammarus villosus	Throughout the State	
Fox	Vulpes vulpes	Offshore islands only	
Grey squirrel	Sciurus carolinensis	Throughout the State	
Greylag goose	Anser anser	Throughout the State	
Harlequin Ladybird	Harmonia axyridis	Throughout the State	
Hedgehog	Erinaceus europaeus	Offshore islands only	
Irish stoat	Mustela erminea hibernicus	Offshore islands only	
Japanese skeleton shrimp	Caprella mutica	Throughout the State	
Muntjac deer	Muntiacus reevesi	Throughout the State	
Muskrat	Ondatra zibethicus	Throughout the State	
Quagga Mussel	Dreissena rostriformis	Throughout the State	
Roach	Rutilus rutilus	Throughout the State	
Roe deer	Capreolus capreolus	Throughout the State	
Ruddy duck	Oxyura jamaicensis	Throughout the State	

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Siberian chipmunk	Tamias sibiricus	Throughout the State	
Slipper limpet	Crepidula fornicata	Throughout the State	
Stalked sea squirt	Styela clava	Throughout the State	
Tawny owl	Strix aluco	Throughout the State	
Wild boar	Sus scrofa	Throughout the State	
Zebra mussel	Dreissena polymorpha	Throughout the State	

Appendix B - List of species present on the Union 'List of Concern'.

PLANTS

American skunk cabbage Lysichiton americanus

Asiatic tearthumb Persicaria perfoliata (Polygonum perfoliatum)

Curly waterweed Lagarosiphon major

Eastern Baccharis Baccharis halimifolia

Floating pennywort Hydrocotyle ranunculoides

Floating primrose willow Ludwigia peploides

Green cabomba Cabomba caroliniana

Kudzu vine Pueraria lobata

Parrot's feather Myriophyllum aquaticum

Persian hogweed Heracleum persicum

Sosnowski's hogweed Heracleum sosnowskyi

Water hyacinth Eichhornia crassipes

Water primrose Ludwigia grandiflora

Whitetop weed Parthenium hysterophorus

ANIMALS

Amur sleeper Perccottus glenii

Asian hornet Vespa velutina

Chinese mitten crab Eriocheir sinensis

Coypu Myocastor coypus

Fox squirrel Sciurus niger

Grey squirrel Sciurus carolinensis

Indian house crow Corvus splendens

Marbled crayfish Procambarus spp.

Muntjac deer Muntiacus reevesii

North american bullfrog Lithobates (Rana) catesbeianus

Pallas's squirrel Callosciurus erythraeus

Raccoon Procyon lotor

Red swamp crayfish Procambarus clarkii

Red-eared terrapin/slider Trachemys scripta elegans

Ruddy duck Oxyura jamaicensis

Sacred ibis Threskiornis aethiopicus

Siberian chipmunk Tamias sibiricus

Signal crayfish Pacifastacus leniusculus

Small Asian mongoose Herpestes javanicus

South American coati Nasua nasua

Spiny-cheek crayfish Orconectes limosus

Topmouth gudgeon Pseudorasbora parva

Virile crayfish Orconectes virili