

INVASIVE ALIEN PLANT SPECIES - SITE ASSESSMENT REPORT

DEVELOPMENT LANDS AT SCHOLARSTOWN ROAD, DUBLIN 16

INVASIVE PLANT SOLUTIONS

17 JUNE 2019 | ISSUE 5 : 01 OCTOBER 2019

I.A.P.S. SITE ASSESSMENT REPORT

DEVELOPMENT LANDS at SCHOLARSTOWN ROAD DUBLIN 16

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I.A.P.S. SITE ASSESSMENT REPORT

DEVELOPMENT LANDS at SCHOLARSTOWN ROAD									
PROJECT NO.	SD-01-19	GPS POSITION : ITM	X	712469	Y	726838	TIME	2.30 PM	
DATE OF ASSESSMENT	07 JUNE 2019	WEATHER	COOL, CLOUDY AND BREEZY, WITH A RISK OF SHOWERS						

SECTION 1 : INTRODUCTION

This Site Assessment report has been prepared for the client / agency / agent referenced in Section 2 below, and is for their sole and exclusive use. The report reflects the particular site circumstances and conditions, as they presented on the day of inspection. Depending on the time of year of the site assessment, and particularly in advance of, or at the beginning of, the annual growing season, the evidence of invasive plant species on site may be limited. In these circumstances a follow up site inspection, later in the year, may be recommended. This will be included in Conclusions and Recommendations at Section 7 of the report.

By their nature, invasive alien plant species are aggressive interlopers to our native habitat, are capable of aggressive and rapid dominance, and if left untreated generally result in extensive habitat impairment. It is therefore reasonable to conclude from this report that, where invasive plant species are identified and control measures are not applied, that these plant species will persist and spread beyond their observed locations.

In addressing invasive alien plant species the precautionary principle should always be applied to their assessment, management and control. All recommended management and control measures should be carried out strictly in accordance with a Site Specific Treatment Plan, and follow "best practice" principles, as set out in technical reference documents such as the UK Environment Agency's *The Knotweed Code of Practice*

Control measures should be implemented using a recognised professional service with expertise in this field of work, and take into account any and all sensitivities highlighted in this report. Particular care should be taken in circumstances where the invasive plant species are located within an officially designated site of ecological importance, such as an SAC, SPA or NHA, or are set within the context of known ecological sensitivities. Where the use of pesticides / herbicides are proposed, these should be applied strictly in accordance with the manufacturers recommendations, by a registered Professional Pesticides User, and fully in compliance with the European Communities (Sustainable Use of Pesticides) Regulations, 2012, (S.I. 155 of 2012).

Under no circumstances should any invasive alien plant species be cut or dug out without the advice, direction and supervision of an invasive species specialist. Most plant species have extensive root / rhizome systems which spread well beyond the footprint of the above ground plant, and can regenerate themselves from very small fragments of root or stem. Some plants produce very substantial quantities of seeds which can remain viable for many years, while others produce a sap which will cause severe skin blistering, up to and including third degree burns.

Furthermore the off-site removal of Japanese knotweed, its variants, and soil infested with knotweed material, is strictly controlled by legislation and will require a licence from the National Parks and Wildlife Service in advance of any removal, in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477).

To prevent the uncontrolled spread of invasive alien plant species strict bio-security measures and protocols should always be observed.

SECTION 2 : LEGISLATIVE CONTEXT

Japanese Knotweed, *Fallopia japonica*, and other invasive plant species, are listed as Invasive Alien Plant Species in Part 1 of the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477 of 2011, as amended). In addition, soils and other material containing Knotweeds are classified in Part 3 of the Third Schedule as vector materials and are subject to the same strict legal controls. Failure to comply with the legal requirements set down can result in either civil or criminal prosecution, with very severe penalties accruing. A person who commits an offence under Regulations 49 & 50 is liable (a) on summary conviction, to a Class A fine or imprisonment for a term not exceeding six months, or both, or (b) on conviction on indictment, to a fine not exceeding €500,000, or imprisonment for a term not exceeding three years, or both. A person who knowingly incites, directs, procures, permits or assists another person to carry out an action that is an offence under these Regulations shall also be guilty of an offence.

The relevant sections of the regulations are reproduced below.

- 49(2) *Save in accordance with a licence granted [by the Department of Arts, Heritage and the Gaeltacht], any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place [a restricted non-native plant], shall be guilty of an offence.*
- 49(3) *... it shall be a defence to a charge of committing an offence under paragraph (1) or (2) to prove that the accused took all reasonable steps and exercised all due diligence to avoid committing the offence.*
- 50(1) *Save in accordance with a licence, a person shall be guilty of an offence if he or she [...] offers or exposes for sale, transportation, distribution, introduction or release—*
- (a) [any restricted non-native animal or plant species],
 - (b) anything from which an animal or plant referred to in subparagraph (a) can be reproduced or propagated, or
 - © a vector material listed in the Third Schedule, [which includes] soil or spoil taken from places infested with Japanese Knotweed....and its hybrids...

It is an offence under regulations 49(2) and 50(1) to spread, or cause to spread, Japanese Knotweed. An offence may be avoided only if the relevant party can prove that they took all reasonable steps to avoid causing an offence under the legislation. Therefore, in compliance with these regulations, this management plan will rely solely on methodologies necessary to ensure strict compliance with the legislation.

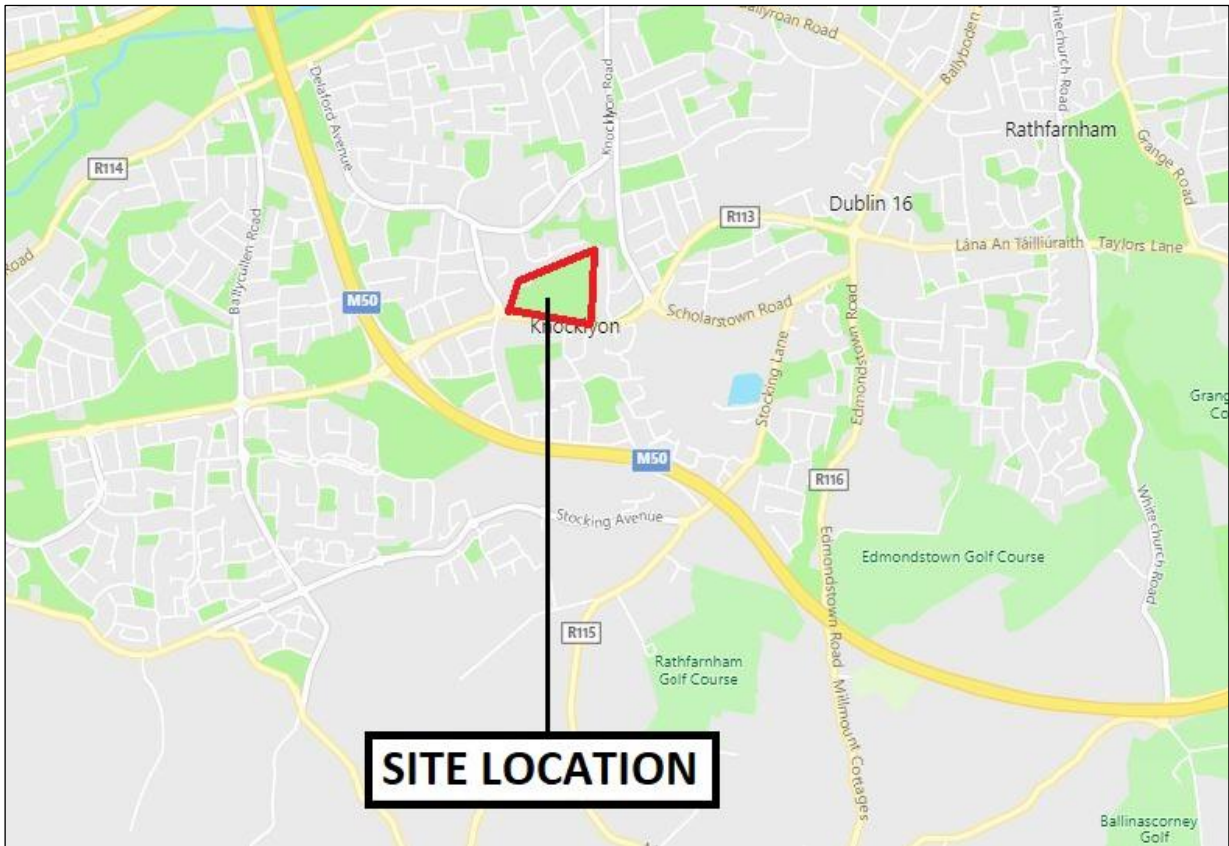
SECTION 3 : CLIENT & SITE DETAILS

GENERAL DETAILS										
SITE ADDRESS	SCHOLARSTOWN ROAD, DUBLIN 16									
CLIENT / AGENT DETAILS	ARDSTONE HOMES LIMITED c/o KSN PROJECT MANAGEMENT 4 CLONSKEAGH SQUARE CLONSKEAGH DUBLIN 14					OWNERSHIP	PUBLIC	PRIVATE	X	
						TEL / MOB	01 2776999 / 087 9237855			
						EMAIL	kkeegan@ksnpm.ie			
STATE AGENCIES INVOLVED	CO. COUNCIL		NPWS		IFI		BORD NA MONA		OTHER	
	ESB		IRISH RAIL		GNI		IRISH WATER		NO	X
CONSULTANTS	KSN - PROJECT MANAGEMENT / THORNTON O'CONNOR - PLANNING CONSULTANTS / JOHN FLEMING – ARCHITECTS									
SITE DESCRIPTION	<p>THE PROPERTY COMPRISES A RECTILINEAR GREENFIELD SITE, WITH TWO RESIDENTIAL BUNGALOWS CENTRALLY LOCATED WITHIN THE HOLDING. THE TERRAIN IS GENERALLY LEVEL BUT WITH THE NORTH EASTERN SECTOR GENTLY SLOPING DOWN FROM THE SOUTH WEST TO THE NORTH EAST</p> <p>THE SITE IS LOCATED TO THE NORTH OF SCHOLARSTOWN ROAD, BETWEEN JUNCTION 12 OF THE M50 MOTORWAY TO THE WEST AND THE ROUNDABOUT JUNCTION WITH TEMPLEROAN ROAD TO THE EAST, DIRECTLY OPPOSITE ST. COLMCILLE'S SCHOOL.</p> <p>THE SITE IS BOUNDED BY SCHOLARSTOWN ROAD TO THE SOUTH, BY A PRIVATE DETACHED RESIDENCE, GATELODGE AND DRIVEWAY TO THE WEST, BY THE REAR GARDENS OF HOUSES ON DARGLE WOOD TO THE NORTH, AND BY THE REAR GARDENS OF HOUSES ON SCHOLARSTOWN PARK TO THE EAST. ALL BOUNDARIES ARE CLEARLY DEFINED, AND TYPICALLY DEMARCATED IN A COMBINATION OF MASONRY WALLS, STONE WALLS, TIMBER FENCING AND METAL RAILINGS</p> <p>TO THE SOUTH, WEST AND NORTH WEST, THE SITE IS ALSO BOUNDED BY STANDS OF MATURE NATIVE TREES, WITH THE BALANCE OF BOUNDARY ZONES CONTAINING NATIVE SHRUBS AND SCRUB. THE MAJORITY OF THE LANDS ARE IN NATIVE MEADOW, WITH A SMALL PORTION OF THE NORTH EASTERN SECTOR UNDER CULTIVATION</p>									
SITE AREA	APPROX. 5.5 Ha.									
SITE USAGE	AGRICULTURAL		FORESTRY		RESIDENTIAL	X	COMMERCIAL		INDUSTRIAL	
	PUBLIC SPACE		GREENFIELD	X	BROWNFIELD		OTHER			

SECTION 4 : OVERALL INFESTATION DETAILS

INVASIVE ALIEN SPECIES									
JAPANESE KNOTWEED		GIANT KNOTWEED		BOHEMIAN KNOTWEED		HIMALAYAN KNOTWEED			
GUNNERA		HIMALAYAN BALSAM		GIANT HOGWEED		RHODODENDRON			
AMERICAN SKUNK CABBAGE		THREE CORNERED GARLIC	X	SPANISH BLUEBELL		X	HOTTENTOT FIG		
OTHER NON NATIVE SPECIES									
BUDDLEIA		WINTER HELIOTROPE	X	MONTBRETIA		OTHER			
DESCRIPTION & EXTENT OF I.A.P.S. COLONISATIONS <u>THREE CORNERED GARLIC & SPANISH BLUEBELL</u> – TCG/SB 1 THERE IS A GROUP OF SMALL STANDS OF THREE CORNERED GARLIC AND SPANISH BLUEBELL LOCATED IN THE SOUTH WESTERN CORNER OF THE SITE, DIRECTLY BEHIND THE NEIGHBOURING GATE LODGE TO THE WEST OF THE DEVELOPMENT SITE THE STANDS ARE LOCATED ON SEMI BARE GROUND, UNDER A MATURE HORSE CHESTNUT TREE, WITH EVIDENCE OF THEIR PRESENCE UP TO, AND INCLUDING, ALONG THE TIMBER BOUNDARY FENCING THE PLANTS ARE IN THEIR POST FLOWERING STAGE, AND ARE CURRENTLY DYING BACK ABOVE GROUND					DESCRIPTION & NON-NATIVE PLANT COLONISATIONS <u>WINTER HELIOTROPE</u> – WH 1, 2 & 3*** THERE ARE A SERIES OF THREE LINEAR STANDS OF WINTER HELIOTROPE, WHICH OCCUPY THE GROUND IMMEDIATELY BEHIND THE MASONRY WALLS FORMING THE SOUTHERN BOUNDARY WITH SCHOLARSTOWN ROAD *** ALTHOUGH NOT A SCHEDULED INVASIVE ALIEN PLANT SPECIES, THESE PLANTS ARE CLASSIFIED AS NON-NATIVE, AND ARE CONSIDERED A THREAT TO NATIVE BIO-DIVERSITY. THEIR RECORDING IS FOR INFORMATION PURPOSES, AND THE DECISION ON THEIR MANAGEMENT IS FOR THE PROPERTY / PROJECT ENVIRONMENTAL AND ECOLOGICAL CONSULTANTS				
CONDITION OF INFESTATIONS									
GROWTH STAGE	EMERGENT		JUVENILE		MATURE		DIE BACK		X
CONDITION	HEALTHY	X	DISTRESSED		STUNTED		BONSAI		
PREVIOUS TREATMENT / CUTTING	YES		NO	X	DETAILS	N/A			
RISKS FROM PLANTS									
BOUNDARIES	X	SOFT LANDSCAPE	X	HARD SURFACES		STRUCTURES		ADJOINING PROPERTIES	X

SECTION 5 : SITE LOCATION AND SITE MAPS



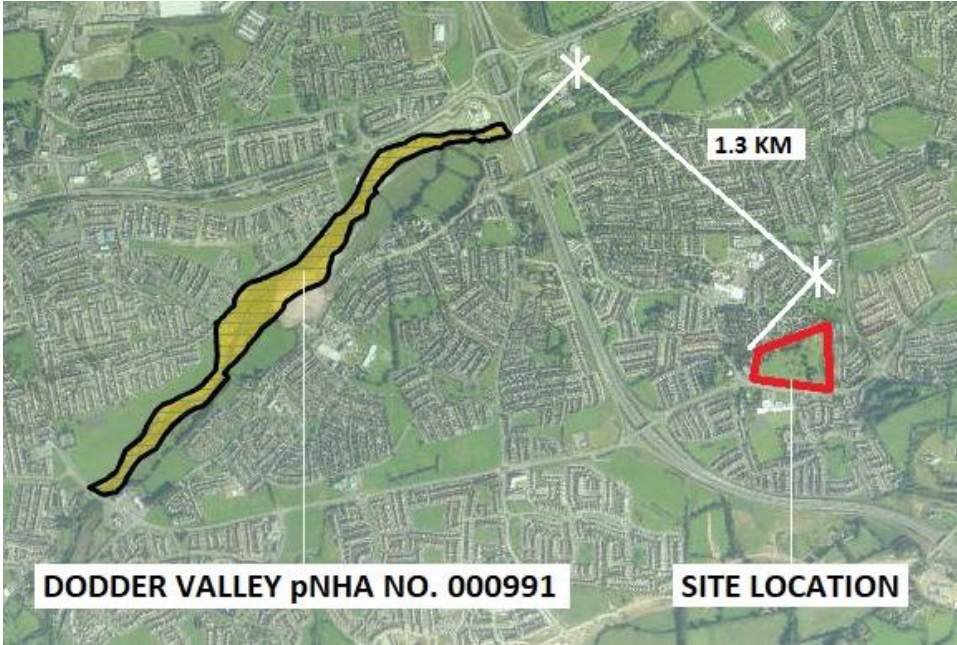
SITE LOCATION MAP



OVERALL SITE LAYOUT : LOCATION OF I.A.P.S. AND NON-NATIVE PLANTS

SITE LOCATION MAP & OVERALL SITE LAYOUT REPRODUCED COURTESY OF BING MAPS

SECTION 6 : ENVIRONMENTAL IMPACT AND LOCAL SENSITIVITIES

ENVIRONMENTAL CONTEXT								
VISUAL IMPACT	MINIMAL	X	MODERATE		SIGNIFICANT		SEVERE	
ENVIRONMENTAL IMPACT	LIMITED	X	MODERATE		SIGNIFICANT		SEVERE	
TRANSLOCATION RISK	LOW		MEDIUM	X	HIGH		ACUTE	
PROXIMITY TO WATER BODY	NONE	X	VICINITY		NEARBY		ADJOINING	
NATURE OF WATER BODY	RIVER	N/A	SEA	N/A	LAKE	N/A	STREAM / DYKE	N/A
DESIGNATED STATUS								
IS SITE IN A DESIGNATED AREA	SAC	NO	SPA	NO	NHA / pNHA	NO	NO.	n/a
DESIGNATED AREA NEARBY	SAC	NO	SPA	NO	NHA / pNHA	YES	NO.	pNHA NO. 000991
OTHER SENSITIVITIES								
COMMENTS / NOTES	<p>THE NEAREST DESIGNATED SITE, THE DODDER VALLEY pNHA NO. 000991 IS APPROX. 1.3KM TO THE WEST THE FITZSIMON'S WOOD pNHA NO. 001753 IS APPROX. 4.5KM TO THE EAST OF THE DEVELOPMENT SITE THE GLENASMOLE VALLEY SAC NO. 001209 IS APPROX. 4.1KM TO THE SOUTH WEST OF THE SITE THE WICKLOW MOUNTAINS SAC NO. 002122 IS APPROX. 4.6KM TO THE SOUTH OF THE SITE</p> <p>THERE IS NO EVIDENCE OF DIRECT PATHWAYS TO THE pNHA's AND SAC</p>  <p>MAP SHOWING THE RELATIONSHIP BETWEEN THE DEVELOPMENT SITE & CLOSEST DESIGNATED SITES</p>							

SECTION 7 : INDIVIDUAL INFESTATION DETAILS

DETAILS	NO.	ITM - X	ITM - Y	SIZE (M X M)	DETAILS / COMMENTS
INFESTATION 1	TCG/SB 1	712324	726804	4m x 5m	In south west corner near boundary, behind adjoining gate lodge
INFESTATION 2	WH 1	712379	726785	12m x 5m	Along southern edge of site, behind masonry boundary wall
INFESTATION 3	WH 2	712437	726780	10m x 3m	Along southern edge of site, behind masonry boundary wall
INFESTATION 4	WH 3	712487	726774	6m x 2m	Along southern edge of site, behind masonry boundary wall
INFESTATION 5					
COMMENTS / NOTES					

SECTION 8 : SITE PHOTOGRAPHS



TCG/SB 1 – OVERALL ZONE OF INFESTATION UNDER TREE



TCG/SB 1 – PLANTS IN DIEBACK STAGE



TCG/SB 1 – ALONG SOUTHERN FENCE LINE



TCG/SB 1 – ALONG WESTERN FENCE LINE



WH 1 – LOOKING SOUTH



WH 2 – LOOKING SOUTH

SECTION 9 : CONCLUSIONS & RECOMMENDATIONS

1. BASED ON THE TIME OF YEAR, AND THE PREVAILING SITE CONDITIONS, IT IS POSSIBLE THAT THE I.A.P.S. PLANTS COULD BE PRESENT BEYOND THE LIMITS RECORDED AT THE TIME OF INSPECTION. IN APPLYING THE "PRECAUTIONARY PRINCIPLE", SITE MONITORING SHOULD BE CONTINUED, PARTICULARLY ACROSS THE 2020 GROWING SEASON
2. THE AREA OF THREE CORNERED GARLIC & SPANISH BLUEBELL INFESTATION SHOULD BE SECURELY FENCED OFF, INCLUDING A 3 – 5m BUFFER ZONE. FENCING SHOULD BE STURDY AND INCORPORATE APPROPRIATE WARNING / ADVISORY SIGNAGE
3. ALTHOUGH CURRENTLY IN THEIR ANNUAL DIEBACK STAGE, THE I.A.P.S. INFESTATIONS ARE GROWING HEALTHILY, AND ARE SUITABLE FOR A HERBICIDE CONTROL PROGRAMME. A MULTI ANNUAL CONTROL PROGRAMME SHOULD BE DEVELOPED AND IMPLEMENTED IN THE SPRING OF 2020, TO ARREST THE RISK OF FURTHER SPREAD AND COMMENCE THE PROCESS OF ERADICATION
4. NO GROUND MAINTENANCE, OPENING UP OR GROUND DISTURBANCE SHOULD BE CARRIED OUT WITHIN FENCED AREAS, WITHOUT PRIOR CONSULTATION WITH, AND THE DIRECTION OF, AN INVASIVE PLANT SPECIES SPECIALIST, AND THEN ONLY UNDER STRICT SUPERVISION
5. ALL RELEVANT STAFF SHOULD BE BRIEFED ON THE IDENTIFICATION, RISKS AND DANGERS OF I.A.P.S., AND ON THE SPECIFIC MEASURES, RESTRICTIONS AND PROTOCOLS TO BE DEPLOYED ON THE SITE
6. IF ACCESS TO THE INFESTED AREAS IS NECESSARY, AND PARTICULARLY IF ANY ESSENTIAL WORK HAS TO BE CARRIED OUT WITHIN THE FENCED LOCATIONS, THEN THIS MUST ONLY BE DONE FOLLOWING FORMAL APPROVAL IN ADVANCE, AND AFTER THE PREPARATION AND AGREEMENT OF A "TASK SPECIFIC" METHOD STATEMENT. NO VIABLE PLANT MATERIAL OR RHIZOME SHOULD BE DISTURBED IN, OR REMOVED FROM, THE ZONES OF INFESTATION
7. IF THERE ARE DEVELOPMENT PROPOSALS BEING CONSIDERED FOR THE IDENTIFIED LOCATIONS WHICH WILL ENCROACH ON THE I.A.P.S. INFESTED AREAS, THEN A SITE SPECIFIC GROUND REMEDIATION PROGRAMME SHOULD BE DEVELOPED AND DEPLOYED, WHICH WOULD PROVIDE FOR REMOVAL OF ALL ASSOCIATED INFESTED SOIL, AND IT'S BIO-SECURE DISPOSAL. THIS PLAN SHOULD INCLUDE ASSESSMENT AND PROVISION FOR VERTICAL AND HORIZONTAL GROUND PROTECTION ALONG PROPERTY BOUNDARIES, AND ANY OTHER RELEVANT MEASURES WHICH ENSURE BIO-SECURITY ACROSS THE SITE & WORKS
8. WHEN USING HERBICIDES AS PART OF THE REMEDIATION PROGRAMME, CONSIDERATION MUST BE GIVEN TO THE PROXIMITY OF ECOLOGICAL SENSITIVITIES AND DESIGNATED SITES. ECOLOGICAL SCREENING OF THE TREATMENT METHODOLOGY MAY BE REQUIRED, AND THE USE OF NON RESIDUAL, AQUATIC APPROVED, HERBICIDES SHOULD BE SPECIFIED FOR TREATMENT
9. ALTHOUGH THIS ASSESSMENT WAS COMISSIONED ONLY FOR INVASIVE ALIEN PLANT SPECIES, THE PRESENCE OF WINTER HELOITROPE (WH 1, 2 & 3) HAS BEEN NOTED AND RECORDED. WE SUGGEST THAT THESE STANDS ARE ALSO SUBJECT TO A TREATMENT PROGRAMME, IN ADVANCE OF ANY PROPOSED DEVELOPMENT WORKS. IF INFESTED SOILS ARE TO BE DISTURBED, MOVED, OR REMOVED FROM SITE, THEN DUE CONSIDERATION SHOULD BE GIVEN TO PROTOCOLS THAT SHOULD BE APPLIED TO THAT PROCESS, TO MITIGATE THE RISK OF THEIR SPREAD TO OTHER, NON INFESTED, LOCATIONS
10. INVASIVE PLANT SPECIES, BY THEIR NATURE, ARE AGGRESSIVE AND CAN BE INTRODUCED ONTO PROPERTY INADVERTENTLY, VIA MANY DIFFERENT MEANS AND ROUTES. WE WOULD THEREFORE ENCOURAGE ALL PARTIES TO FAMILIARISE THEMSELVES WITH THE IDENTIFICATION OF THE PRIMARY INVASIVE ALIEN PLANT SPECIES PRESENT IN IRELAND, AND PARTICULARLY JAPANESE KNOTWEED, ITS VARIANTS AND HYBRIDS. WE ALSO RECOMMEND VIGILANCE IN THE INSPECTION OF PROPERTY, AND THE USE OF SPECIALIST ADVICE WHERE THERE IS DOUBT ABOUT ANY PARTICULAR PLANTS ENCOUNTERED



KYRAN COLGAN
Director

17 JUNE 2019





I.A.P.S. SITE ASSESSMENT REPORT

**DEVELOPMENT LANDS at SCHOLARSTOWN ROAD
DUBLIN 16**

APPENDIX 1

THREE CORNERED GARLIC : N.N.S.S. PLANT IDENTIFICATION SHEET

Non-Native Garlics

Species Description

Scientific names: *Allium* species

AKA: Gerllyg (Welsh)

Native to: Mediterranean, Caucasus and Iran

Habitat: Roadsides, hedge banks, riverbanks, field margins, rough and waste ground and in woodland

Garlics are perennial herbs with bulbs and grass-like leaves, usually smelling of garlic when fresh and crushed. The most widespread invasive garlics in the UK are Three-cornered Garlic *Allium triquetrum* and Few-flowered Garlic *Allium paradoxum*. Other invasive species include Rosy Garlic *Allium roseum* and Keeled Garlic *Allium carinatum*.

The seeds of Three-cornered Garlic are spread naturally by ants. It was established initially in Guernsey in 1849 and is now naturalised and increasingly abundant and widespread in milder areas of the UK, especially in the south and west, with scattered, sometimes short-lived, populations elsewhere.

Few-flowered Garlic spreads by means of bulbils (small bulbs produced above ground). It was first recorded in the wild near Edinburgh in 1863 and can be very invasive in disturbed habitats. It is increasingly abundant throughout its range, especially in southern Scotland and is most common in the east of Britain.

Rosy Garlic was first recorded in the wild in 1837 and is spreading, especially in south-west England. Keeled Garlic has been naturalised since at least 1806, but there is little evidence of a significant increase in range over the last 50 years.



Key ID Features



Three-cornered and few-flowered garlic

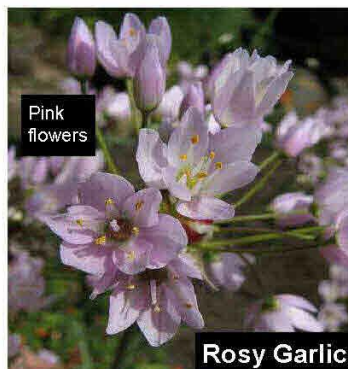


Stem cross section is strongly angled

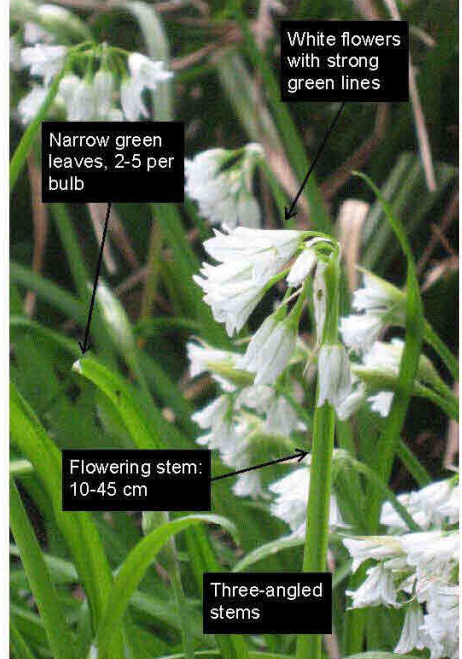
Rosy garlic



Stem cross section is round



Three-cornered Garlic



Identification throughout the year

Three-cornered garlic flowers April to June.

Few-flowered garlic flowers April to May.

Rosy garlic flowers May to June.

Keeled garlic flowers in August.

Leaves are not present over winter as these species die back in cold winters and come up from bulbs in the spring.

Distribution

Three-cornered garlic is widespread in milder areas, especially the south-west, and has increased in numbers and range.

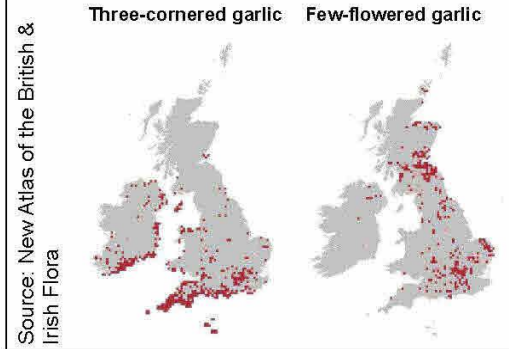
Few-flowered garlic has a mainly eastern distribution and is increasing throughout its range.

Rosy garlic is scattered in the south and west and is spreading.

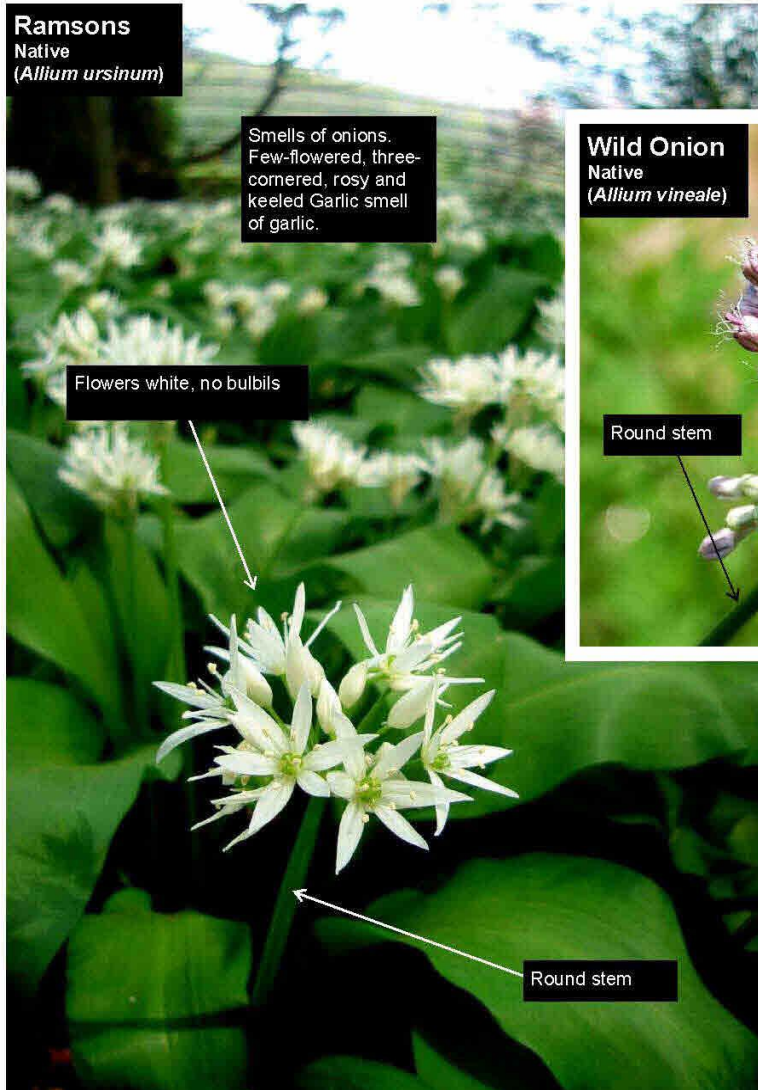
Keeled garlic is scattered throughout the lowlands but does not seem to be increasing.

Similar Species

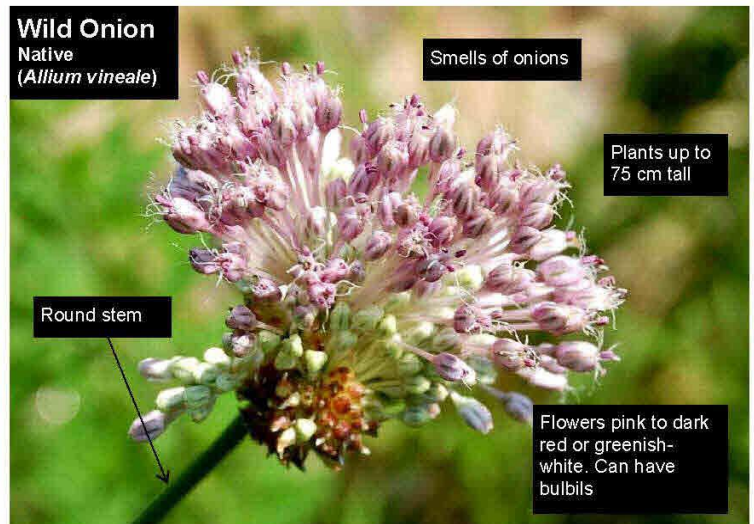
There are a number of native onion and garlic species in the UK with ramsons and wild onion being the most common. There are many species with leaves which are similar to the non-native garlics but the onion/garlic smell is distinctive.



Ramsons
Native
(*Allium ursinum*)



Wild Onion
Native
(*Allium vineale*)



References and further reading:

Preston *et al.* (2002) "New Atlas of the British & Irish Flora". Oxford University Press

Sell, P & Murrell, G (1996) "Flora of Great Britain and Ireland. Volume 5: *Butomaceae-Orcidaceae*". Cambridge University Press

Stace, C (1997) "New Flora of the British Isles". Cambridge University Press