

ORCHID IRELAND SURVEY 2014



FINAL REPORT

6th October 2014

Tom Curtis and Faith Wilson

ORCHID IRELAND SURVEY 2014

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1. Introduction

Dr Tom Curtis and Faith Wilson were appointed by the National Museum and Galleries of Northern Ireland to conduct surveys of wild orchid populations in Ireland as part of the Orchid Ireland project. The approach to the Orchid Ireland surveys in 2014 differed greatly slightly from that taken in previous years. In 2014 the main focus was on the recording of orchid populations in sites identified by the National Parks and Wildlife Service in southern Ireland which hold areas of the Annex I habitat 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (**Festuco-Brometalia**) (* important orchid sites) as listed under the E.U. Habitats Directive. The data gathered will be utilised by National Parks and Wildlife Service to inform the next Article 17 assessment of the habitat.

2. Methodology

Twenty five sites were selected for the field surveys as detailed in **Table 1**, which also provides summary information on the location, designation status and availability of background information on the listed sites. The majority (20) of these sites derive from **Table 31** of The Irish Semi-natural Grasslands Survey [ISGS] 2007-2012. *Irish Wildlife Manuals* No. **78**, which is a list of sites holding areas of the Annex I habitat 6210 that are considered by the authors of that report to be potentially the orchid-rich (priority) version of this habitat. This assessment was based on the presence of one or more orchid species considered in the report to be a component of this priority habitat, as recorded in relevés taken during the course of the ISGS. Appendix I of the ISGS report provides a list of the relevant orchid taxa as follows:

“If the 6210 grassland has a population of any orchid species other than the relatively common *Dactylorhiza fuchsii* and *Dactylorhiza maculata* it should be considered for the orchid-rich priority habitat *6210. The following orchid species have been recorded in this Annex I habitat: *Anacamptis pyramidalis*, *Coeloglossum viride*, *Dactylorhiza fuchsii* v. *okellyi*, *Epipactis palustris*, *Gymnadenia conopsea*, *Listera ovata*, *Neotinea maculata*, *Ophrys apifera*, *Ophrys insectifera*, *Orchis mascula*, *Orchis morio*, *Platanthera bifolia*, *Platanthera chlorantha*.”

The site reports and habitat maps from that survey which were provided by NPWS pinpointed areas of habitat 6210 – habitat which were mapped onto ortho-aerial photos and 10-figure GPS grid references for relevé locations were also provided in pdf format – see **Appendix 1** and **Appendix 2** for examples of same. The relevant GIS datasets from the ISGS survey were also held by the project team and these datasets were used on a mobile mapping device to guide the field surveys and to target where the areas of potentially orchid-rich areas of calcareous grassland (6210) were for the orchid surveys in 2014.

In addition to the 20 ISGS grassland sites were five sites not covered by the ISGS survey - four are SACs selected for 6210 and one is currently undesignated. Site details and some available mapping for these sites were also provided by NPWS.

Table 1. List of sites for survey in the Orchid Ireland 2014 survey.

Site Name	County	Sample Grid Ref	Sac & Code	SAC selected for 6210?	pNHA?	NPWS ISGS Survey & code	Irish Semi-natural Grassland Survey site report and habitat map available
Crossrah	Cavan	N4882283817	No	n/a	No	Yes (1061)	Yes
Cahercarney Heath	Galway	M41951015	No	n/a	No	No	No, but see Cahercarney Heath.doc
Castletaylor Complex	Galway	M4605415308	Yes (242)	Yes	Yes (242)	No	No
Coole-Garryland Complex	Galway	M4297404967	Yes (252)	Yes	Yes (252)	No	No
Glenloughaun Esker	Galway	M8258427015	Yes (2213)	Yes	No	No	No
Killure More (Kilgerrill) Esker	Galway	M 77983 32886	No	n/a	Yes (254)	Yes (2329)	Yes
Castlesampson Esker	Roscommon	M944403	Yes (1625)	Yes	Yes (1625)	No	No
Bishopsquarter	Clare	M2498909023	Yes (54)	Yes	Yes (54)	Yes (1625)	Yes
Cahermaclanchy	Clare	M0819600321	Yes (20)	Yes	Yes (20)	Yes (1612)	Yes
Clab	Clare	M2933702233	Yes (1926)	Yes	Yes (1926)	Yes (1649)	Yes
Deelin More	Clare	M2642803418	Yes (54)	Yes	Yes (54)	Yes (1672)	Yes
Derreen West	Clare	M1228203789	Yes (20)	Yes	Yes (20)	Yes (1671)	Yes
Keelhilla	Clare	M3342402957	Yes (1926)	Yes	Yes (1926)	Yes (1616)	Yes
Lislarheenmore	Clare	M1717403434	Yes (20)	Yes	Yes (20)	Yes (1615)	Yes
Murrooghkilly	Clare	M1556708856	Yes (20)	Yes	Yes (20)	Yes (1617)	Yes
Poulaphuca	Clare	R2717696707	Yes (1926)	Yes	Yes (1926)	Yes (1676)	Yes
Rannagh West	Clare	R2692399906	Yes (54)	Yes	Yes (54)	Yes (1623)	Yes
Ardrahan Grasslands	Galway	M4459212874	Yes (2244)	No	No	Yes (2310)	Yes
Ballybranagan	Galway	M3665510882	Yes (268)	Yes	Yes (268)	Yes (2269)	Yes
Carrowmoreknock	Galway	M2141141652	Yes (297)	Yes	Yes (297)	Yes (2249)	Yes
Cartron (E.D. Drumacoo)	Galway	M4028915585	Yes (606)	Yes	Yes (606)	Yes (2307)	Yes
Inishroo	Galway	M3309111221	Yes (268)	Yes	Yes (268)	Yes (2270)	Yes
Leagh South	Galway	M3193208610	Yes (1926)	Yes	Yes (1926)	Yes (2271)	Yes
Slyne Head Peninsula	Galway	L 58161 43823 L 58100 43890	Yes (2074)	Yes	Yes (2074)	Yes (2212)	Yes
Toryhill	Limerick	R5308543031	Yes (439)	Yes	Yes (439)	Yes (2703)	Yes

The survey was conducted as follows:

- 1) For those sites selected for survey the areas of Annex I habitat 6210 were identified having first consulted the Irish Semi-natural Grasslands Survey mapping and site reports in advance. The 25 sites were visited between 7th July and 8th August 2014, and the orchid populations present were recorded.
- 2) The field data for each site was recorded on the calcareous grassland monitoring sheets which were developed by Dwyer *et al.* (2007) as presented in **Appendix 3**.
- 3) The method used was to walk a transect across a site focusing on the areas of grassland habitat identified as 6210 habitat by the ISGS and at appropriate point locations where orchids occurred, the identities and numbers of orchids seen in a circular plot of radius 10 metres, were noted on a handheld mapping device.

Details of digital mapping and excel spreadsheet.

- 4) The locations of orchid populations encountered on the transects were recorded using a ten figure grid (set to Irish National Grid 1965). The numbers of plants of each taxon identified at each point was also recorded with the accompanying grid reference and if appropriate a note/comment on the population was made.
- 5) Where orchids were recorded in habitats that are not calcareous grassland (6210) then this was clearly noted, so that these records are not included in the Article 17 assessment for the habitat.
- 6) An overall count of the total population of each of the orchid species occurring in habitat 6210 within the boundary of each site was made and is provided in an MS Excel sheet. These population numbers are based on the actual counts made on the transects in the site and are not estimates.
- 7) Notes on the 2014 presence, extent and conservation status (impacts/pressures/threats) of the EU Habitats Directive Annex I habitat 6210 were recorded for each site surveyed. Reference, in this regard, was made to the Irish Semi-natural Grasslands Survey (2007-2012) site reports and maps.
- 8) Monitoring stops were made where appropriate and in most cases, at or close to the points previously sampled during the ISGS Survey so that any changes in habitat composition might be assessed.
- 9) Individual records of the orchid taxa at each recorded grid reference are provided digitally as an MS Excel spreadsheet. A template which included fields for taxon name, grid reference, location, site, vice-county, record date, recorder/s, determiner/s, population size, source of record and notes/comments which was provided by NPWS was used .
- 10) Orchid Ireland hard copy record cards were completed for each site visited.
- 11) Site reports for each site were completed using the Site Report Card template presented in **Appendix 4**.

3. Results

All 25 sites were visited between 7th July and 8th August 2014 and a comprehensive survey of each was undertaken through a thorough walk over the site which focused on those areas of habitat mapped as 6210 by ISGS. All the parameters listed in the methodology were recorded on the Site Field Card and mapped digitally on an iPad.

A template for the Site Report was developed and general site information on the site and a full description of the site as presented by ISGS in the site report is presented. This is followed by data on the species of orchids which if present, are marked in Bold Italic together with a tally of the numbers of the species recorded on the transects across the site. A general description of the vegetation based on the 2014 survey is then given, indicating any outstanding species or special features of the site.

The Habitat Condition Assessment for the site was conducted by means of a series of Monitoring Stops, within sample areas of 5m², which mostly accorded with those taken by ISGS and the points were chosen for their orchid locations or other relevance to this current survey. The assessment as to whether the habitat can be called 6210/6210* was made against a list of plant species considered to be characteristic of calcareous grassland with the assessment of 6210* being further dependent on the presence of some of the orchid species characteristic of it. The suite of species used to identify orchid rich calcareous grassland were those developed for assessing sites during the Grassland Monitoring Survey of 2007 and which were further refined with additional species added (identified with a ¥) or removed (identified with a Σ) by the ISGS survey are as follows:

- *Antennaria dioica*
- *Anthyllis vulneraria*
- ¥ *Arabis hirsuta*
- *Asperula cynanchica*
- *Avenula pubescens*
- *Blackstonia perfoliata*
- ¥ *Brachypodium pinnatum*
- *Briza media*
- *Bromus erectus*
- *Campanula rotundifolia*
- Σ *Camptothecium lutescens*
- *Carex caryophyllea*
- *Carex flacca*
- *Carlina vulgaris*
- *Centaurea scabiosa*

- ☒ *Ctenidium molluscum*
- ∑ *Conopodium majus*
- *Daucus carota*
- ∑ *Dryas octopetala*
- *Filipendula vulgaris*
- *Galium verum*
- *Gentiana verna*
- ☒ *Gentianella amarella*
- *Gentianella campestris*
- *Geranium sanguineum*
- ∑ *Helianthemum canum*
- *Hieracium pilosella*
- ☒ *Homalothecium lutescens*
- *Knautia arvensis*
- *Koeleria macrantha*
- *Leontodon hispidus*
- ☒ *Leontodon saxatilis*
- *Linum catharticum*
- *Lotus corniculatus*
- *Origanum vulgare*
- *Primula veris*
- *Ranunculus bulbosus*
- *Sanguisorba minor*
- *Sesleria albicans*
- ☒ *Thymus polytrichus*
- *Trisetum flavescens*

A minimum of seven calcareous grassland indicator species should be present in the monitoring stop.

Orchid species encountered in 6210 habitat as per the ISGS report include:

- *Anacamptis pyramidalis*
- *Coeloglossum viride*
- *Dactylorhiza fuchsii***
- *Dactylorhiza fuchsii* v. *okellyi*
- *Dactylorhiza maculata* subsp. *ericetorum***
- *Epipactis palustris*
- *Gymnadenia conopsea*
- *Listera ovate*
- *Neotinea maculata*
- *Ophrys apifera*
- *Ophrys insectifera*
- *Orchis mascula*
- *Orchis morio*
- *Platanthera bifolia*
- *Platanthera chlorantha*

** These orchid species are considered widespread and abundant and should not be used to indicate orchid rich priority grassland habitat.

Negative indicator species for this habitat included:

- *Arrhenatherum elatius*
- *Cirsium arvense*
- *Cirsium vulgare*
- *Dactylis glomerata*
- *Lolium perenne*
- *Rumex crispus*
- *Rumex obtusifolius*
- *Senecio jacobaea*
- *Trifolium repens*

- *Urtica dioica*

None of these negative indicator species should individually or collectively cover >5%.

Within the sward there should be a grass:herb ratio of between 40-90% herb cover. There should be less than 5% cover of scrub, bracken, heath (woody species except *Juniperus communis*, *Rosa spinosissima*, *Dryas octopetala* and *Helianthemum oelandicum*).

Following the assessment according to the criteria above, the site was considered to have Failed for either Calcareous Grassland category if it had Failed at any one or more Stops. Some of these judgements were very difficult to make as a Stop in the balance usually hinged on the critical absence of one or two species rather than on the poor condition of the habitat. In addition, there were a number of indicative species missing from the list but which should have been included. These included *Leucanthemum vulgare*, *Pimpinella saxifraga* and *Galium sternerii* and the inclusion of one or more of these would often have been sufficient to give a Stop a Pass.

At each Stop, the occurrence of the orchid species present is noted and as their numbers within the immediate sample plot size of 5m² was usually low, and the numbers recorded digitally from at or near adjacent areas are those taken in a circle sweep of 10 metres radius. The indicative locations of the populations recorded on each site are presented in a map with each site report – please note that many species may have been recorded at a single location and therefore it is possible that only some species are obvious on the maps as the other records may be obscured by the first species recorded (the species are plotted in alphabetical order so a record of *Dactylorhiza fuchsii* would obscure a record of *Gymnadenia conopsea* made at the same location for example).

Site Management and Recommended Conservation measures follow and in general this survey found that the majority of sites are under-grazed or are being grazed at the wrong times of the year.

The relative sites were then given a ranking of High, Medium and Low based on their condition, their management, the presence of orchid-rich habitat and of course the numbers of orchids present. These results are given in **Table 2**.

Table 2: Summary of the Conservation Value, habitat condition, management and orchid-richness for the 25 sites visited in 2014.

Site Name	Value	Condition	Management	Orchid richness	No of orchids present	Comment
Cahercarney	High	Good but quarrying residue	Grazed adequately	High & diverse	12	Qualifies as 6210/6210*
Castlesampson	High	Good partly quarried	Grazed adequately threat from aliens	High & diverse	7	Qualifies as 6210/6210*
Deelin More	High	Good except in west area	Grazed and in Burren LIFE	High & diverse	8	Qualifies as 6210/6210* but west area should be removed from areas mapped and identified as 6210
Keelahilla	High	Good but scrub being weed-killed	Grazed and in Burren LIFE	High & diverse	9 + 1 hybrid	Qualifies as 6210/6210* but needs more grazing on hills
Murroghkilly	High	Good but some good areas outside site and bad areas inside	Grazed a little heavily	High and diverse in mixed habitats	10 + 1 hybrid	Qualifies as 6210/6210*. Some areas on south side and some further east should be removed from areas mapped and identified as 6210

Site Name	Value	Condition	Management	Orchid richness	No of orchids present	Comment
Poulaphuca	High	Good but heath in places	In Burren LIFE & improving	Good for <i>D.f.okellyi</i>	7 + 1 hybrid	Qualifies as 6210/6210*. Continue with current regime
Rannagh West	High	Good but uneven	Needs more grazing	Good for <i>D.f.okellyi</i>	8	Qualifies as 6210/6210* but needs management
Leagh South	High	Good and mixed habitats	Grazed adequately	High and diverse	8 + 1 hybrid	Qualifies as 6210/6210*
Killure More	Medium	Good but needs grazing	Undergrazed	Rich	5	Qualifies as 6210/6210* but needs management
Castletaylor	Medium	Only area of value in north with fen	Needs more grazing	Medium	5	Needs management, could recover
Glenloughan	Medium	Some areas good	Needs more grazing	Medium	7	Qualifies as 6210/6210* but needs management. A field in the eastern part of the site needs to be removed from areas identified as 6210

Site Name	Value	Condition	Management	Orchid richness	No of orchids present	Comment
Bishopsquarter	Medium	Mixed with limestone heath	Needs more grazing	Medium	6	Qualifies as 6210/6210* but needs management. Some fields should to be removed from areas identified as 6210
Clab	Medium	Mixed with limestone heath	Needs more grazing	Medium	7	Marginally qualifies as 6210/6210* but needs management. Poor site considering size
Derreen West	Medium	Heterogeneous with meadows	Needs more grazing	Medium	6	Fails as 6210* as needs management. Poor site considering size
Lislarheenamore	Medium	Heterogeneous with wet grassland	Needs more grazing	Medium	6	Pass 6210* but marginal and needs management. Boundary of areas of 6210 needs adjustment
Ardrahan Grasslands	Medium-High	Recovering from heath and scrub removal	Needs more grazing but great potential	Medium	9 +1 hybrid	Qualifies as 6210/6210* but needs management. Owner is attempting better management

Site Name	Value	Condition	Management	Orchid richness	No of orchids present	Comment
Ballybranagan	Medium	Needs more grazing	Undergrazed	Medium	6	Qualifies as 6210/6210* but needs management. Great potential
Tory Hill	Medium	Good as a former quarry	Rabbits doing the grazing	Medium	4	Pass 6210* though a derived version of that habitat. Site stable.
Crossrah	Low	Former quarry scrub invading	Undergrazed	Low	3	Only a very small fragmented area of 6210
Coole-Garryland	Low	No calcareous grassland and no potential	Not applicable	Low	5	Exclude 6210 from qualifying interest for the SAC as does not contain 6210

Site Name	Value	Condition	Management	Orchid richness	No of orchids present	Comment
Cahermaclanchy	Low	Calcareous grassland poor	Undergrazed	Low	6	The site needs a proper grazing regime implemented or should not be listed for 6210 as a qualifying interest. 6210* found outside areas mapped by ISGS as 6210 so consider revising boundary to include it.
Carrowmoreknock	Low	No calcareous grassland	Not relevant	Low	3	Exclude as does not qualify as 6210
Cartron	Low	Calcareous grassland in small patches	Grazed	Low	8	Exclude as does not qualify as 6210, mostly heath and wetland
Inishroo	Low	Grassland poor	Over grazed-fertilised	Low	(2) outside	Exclude as does not qualify as 6210

Site Name	Value	Condition	Management	Orchid richness	No of orchids present	Comment
Slyne Head	Low	Sites identified by ISGS a poor representation for this SAC	Undergrazed and poor	Low	2	The area mapped by ISGS should be excluded as a very small unit of 6210

4. Discussion

From **Table 2** it will be seen that 8 sites qualify as High Value as they are both rich in orchids and in good condition. 10 sites are of Medium Value as they are rich in species, in reasonable condition but need further management, (usually grazing) to improve the condition of the calcareous grassland. A number of them need boundary adjustments to the areas mapped as 6210 as those areas mapped by the ISGS survey do not currently represent areas of the habitat as some sites are now under-grazed. Grazing pressures have clearly changed since the ISGS survey was carried out and in some limited cases this has increased. In those areas the site has improved and Poulaphuca is a site where adherence to the management proposals under the Burren LIFE Scheme has led to the decrease in area of heath and a consequent increase in the area of calcareous grassland. These Medium sites also have the intrinsic potential to carry good areas of the habitats 6210/6210* if grazing levels are increased and implemented at the appropriate times. It was evident during the survey that an increase in grazing causes the retraction in the area of heath and an expansion of calcareous grassland but even in High Value sites where grazing levels are adequate, heath will always predominate on the very shallow soils over limestone pavement whilst in the deeper pockets calcareous grassland will occur. In properly managed sites of this type in the Burren and S.E. Galway, this will always be the manner in which the two habitats occur in a mosaic together.

The numbers of orchid species present at any one site is not necessarily indicative of orchid-rich habitat quality as in a number of sites, for example Cartron, the 8 species recorded are a mixture of those commonly found everywhere, such as *D. fuchsii* together with a number of wetland species. Sites such as Castlesampson and Poulaphuca have slightly lower numbers of species but are of better quality as they contain more specialised species within orchid-rich grassland and hence are of High Value.

Mention should be made of the dominance of *Molinia caerulea* in some calcareous grassland sites especially Castlesampson and Catletaylor and to a degree at Murroghkilly in Fanore. In such situations, all the characteristic species of calcareous grassland are found but with *Molinia* usually dominant. The sites are also orchid-rich and it is clear that calcareous grassland which qualifies as 6210* can occur in either a dry or damp/wet facies. A good example of both types can be seen on Castlesampson Esker where dry 6210* occurs on the south-facing slopes whilst the wet 6210* is found in the north-facing slopes. This is not incompatible with the designated habitat **Festuco-Brometalia** which is a phytosociological **Order** and not a habitat and it encompasses a range of Classes of vegetation within which both types of grassland are included.

With regard to the Low Value sites, of which there are 7 in number, none of these, with the exception of Cahermaclanchy qualify as examples either of 6210 or 6210*. Most are intrinsically poor in the habitat and or orchid species and some such as Coole-Garryland have no intrinsic potential for it. Despite the levels of low grazing, it is considered that these sites are of very low potential for conservation and should probably be excluded from the national conservation assessment of 6210 habitat.

5. References

Dwyer, R., Crowley, W. and F. Wilson (2007). National Parks and Wildlife Service grassland Monitoring Report. Unpublished report for National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

O'Neill, F.H., Martin, J.R., Devaney, F.M. & Perrin, P.M. (2013). The Irish semi-natural grasslands survey 2007-2012. *Irish Wildlife Manuals*, No. 78. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

6. Appendix 1. Sample ISGS site report for Crossrah.

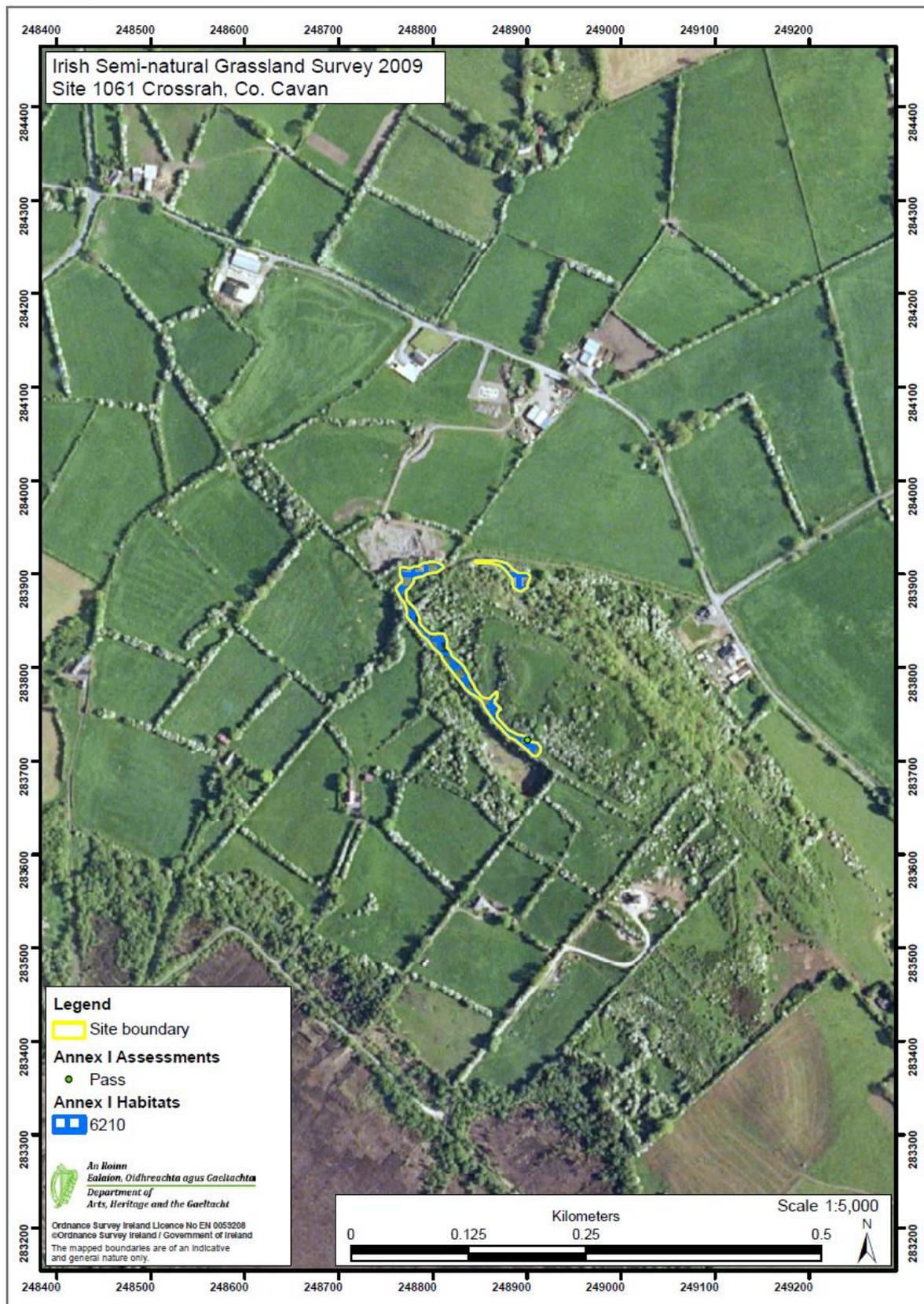
Site no.	1061	Site name	Crossrah				
County	Cavan	Grid Letter	N	Easting	48822	Northing	83817
Townland	Crossrah						
Site area (ha)	0.3	Discovery Map	34	Six Inch	CV042		
NHA		SAC		SPA			
Nature Reserve	<input type="checkbox"/>	National Park	<input type="checkbox"/>	NPWS Region	North Midlands		
Max altitude(m)	110	Min altitude (m)	100	Seasonal flooding	<input type="checkbox"/>		
Soils	Rendzinas/Lithosols						
Parent material	Bedrock at surface-Calcareous						
Date of survey	04/08/2009	Ecologist(s)	T.Higgins/F.O'Neill				
No. relevés	1	Conservation score	24.2%	Threat score	15.4%		
Fossitt habitats (% site)		Adjacent habitats		Internal habitats		Management	
GS1	100.0	ER	GA	BL1	ER2		
		GS	WL	GS1	WS1		
		WS					
Annex I habitats (% site)		Notable features		Geography			
6210	100.0	Other archaeology		Hill or Mountain			
		Fox					
Annex I habitat	Area	Structure and functions	Future prospects	Overall assessment			
6210	Unfavourable-Inadequate	Favourable	N/A	N/A			

Releve	Grid reference	Fossitt	Annex I	Pass or Fail?	Releve	Grid reference	Fossitt	Annex I	Pass or Fail?
01	N 48901 83722	GS1	6210	Pass					

Site synopsis

This is a small site located about 2 km west of Lough Sheelin, Co. Cavan. It comprises the upper slopes and summit of a calcareous knoll, adjacent to an old (> 100 years) disused quarry. The site consists of dry calcareous grassland over thin (1 inch) well-drained mineral soils. Rock outcropping occurs throughout. *Briza media*, *Leontodon hispidus*, *Carlina vulgaris*, *Primula veris*, *Linum catharticum*, *Knautia arvensis* and *Pimpinella saxifraga* are the most frequent plants, and one relevé was used to assess the site for the Annex I habitat 6210 Festuco-Brometalia. The orchid *Gymnadenia conopsea* is present and frequent to locally abundant. Scrub encroachment is widespread and increasing, as grazing by cattle and sheep has been removed for the past two years. A large area of the originally selected site was inaccessible owing to very dense scrub and sheer cliffs. The old disused quarry to the southwest of the site appears to contain dry calcareous grassland when viewed from above, but was not accessible on this occasion. An additional small polygon to the north of the originally selected site was included and contains abundant *Gymnadenia conopsea* in addition to the other flora indicative of dry calcareous grassland. Butterflies are abundant and diverse on site and species seen during the survey include common blue, meadow brown, ringlet, peacock, green-veined white and large white.

7. Appendix 2. Sample ISGS map for Crossrah.



8. Appendix 3. Monitoring form for the condition of 6210 grassland (NPWS grassland monitoring project (2007)).

8. Appendix 4. Orchid Ireland 2014 Site Recording Card

Orchid Ireland 2014 Site Recording Card

Site information					
Locality/ Site Name		County		Discovery Map No.	
Recorder(s)	Tom Curtis & Faith Wilson	Vice-county (No.)		<u>SAC/NHA</u>	000
Grid ref (GPS, National Grid)		Surveyed by NPWS ISGS	Y/N	ISGS Code	
Geology		Survey date	/ /2014	Site selected for 6210	Y/N
Site description (after ISGS)					
Orchid Data					
Orchid species present encountered on transects and number Total =					
<i>Anacamptis pyramidalis</i> (Ap)				<i>Gymnadenia conopsea</i> (Gc) (all were var. <i>conopsea</i>)	
<i>Coeloglossum viride</i> (Cv)				<i>Listera ovata</i> (Lo)	
<i>Dactylorhiza fuchsii</i> (Df)				<i>Neotinea maculata</i> (Nm)	
<i>Dactylorhiza fuchsii</i> var <i>okellyi</i> (Dfok)				<i>Ophrys apifera</i> (Oa)	
<i>Dactylorhiza incarnata</i> var <i>pulchella</i> (Dip)				<i>Ophrys insectifera</i> (Oi)	
<i>Dactylorhiza maculata</i> subsp. <i>ericetorum</i> (Dm)				<i>Orchis mascula</i> (Oma)	
<i>Dactylorhiza majalis</i> var <i>brevifolia</i> (Dmb)				<i>Orchis morio</i> (Omo)	
<i>Epipactis atrorubens</i> (Ea)				<i>Platanthera bifolia</i> (Pb)	
<i>Epipactis helleborine</i> (Eh)				<i>Platanthera chlorantha</i> (Pc)	
<i>Epipactis palustris</i> (Ep)				<i>Spiranthes spiralis</i> (Ss)	
Main Species/ Vegetation (after Orchid Ireland Survey 2014)					

Habitat Condition Assessment**Monitoring of Calcareous Grassland**

Stop	Grid Ref	6210 Y/N	6210* Y/N	Pass/ Fail	Comment
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Orchid Species Present														
Stop	Orchid species present (Abbreviated species codes as per above list)													
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
Overall Result	6210 /6210* Pass or Fail													

Site Management and Recommendations			
Site Management Plan (Y/N)		Burren LIFE Site (Y/N)	
Current Management			
Recommended Conservation Measures			
Ownership			
Access			
Other Remarks			