

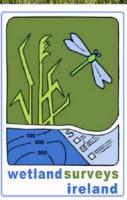




Comhairle Chontae Liatroma Leitrim County Council



An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage



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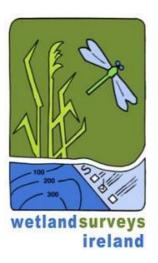
The project is an action of the County Leitrim Heritage Plan 2020-2025 funded under the National Biodiversity Action Plan Fund 2021

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Contents

Ac	knov	vledgements	3
Exe	ecut	ive Summary	4
1	ا 1.1	ntroduction and BackgroundProject summary	
2	2.1 2.2 2.3 2.4	Naterials & MethodsLeitrim Wetlands Field Survey 2021 - Site SelectionLeitrim Wetlands Field Survey 2021 - Field SurveyLeitrim Wetlands Field Survey Database — Structure and ContentLeitrim Wetlands Field Survey (LEWS) — GIS Dataset	6 7 7
3 3 3	8.1 8.2 8.3 8.4 8.5	Results Leitrim Wetlands Field Survey 2021 Wetland types recorded during LEWS Field Survey 2021 Floral Observations Faunal Observations Site Conservation Assessment Threats and Damage to County Leitrim Wetlands	9 11 16 16
	(1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10	Conclusions and Recommendations Distribution and Extent of the Leitrim Wetland Resource Site Designations Planning Controls Ongoing Maintenance of the County Leitrim Wetland Map Site Database Ongoing Maintenance of the County Leitrim Wetland Map GIS Dataset Hydrological Assessment of Wetland Sites Management and Restoration of Wetland Sites Control of invasive species in wetland sites Local Authority Wetlands Policy Water Framework Directive Public Information and Interpretation	23 23 24 24 25 25
5	E	Bibliography	27
Ар	pen	dix 1	29
Аp	pen	dix 2	30

List of Figures

Figure 1: Location of sites selected for survey as part of the Leitrim Wetlands Field Survey 2021	
List of Tables	
Table 1: List of sites surveyed during the Leitrim Wetlands Field Survey 2021 Table 2: Conservation evaluation of sites surveyed during the LEWS 2021. Sites are ranked according to their conservation value	
Table 3: Natura 2000 Impacts and Activities which are likely to have a negative effect on wetlands, and the wetland type most likely to be affected by these activities	

List of Appendices

Appendix 1: National Roads Authority (2009) Site Evaluation Criteria.

Appendix 2: Individual site survey reports from the Leitrim Wetlands Field Survey 2021.

County Leitrim Wetlands Field Survey 2021

This project involved a field survey of thirty four freshwater wetlands in County Leitrim, located in the southern part of the county, with the aim of identifying the specific wetland habitats and ecological interest of each site. These sites had previously been identified as being of potential interest during the County Leitrim Wetland Survey 2019 project. The sites were selected for survey due to the potential occurrence of notable wetland habitats. This report presents the results of the 2021 field survey and includes detailed site descriptions and habitat maps for each of the wetlands surveyed.

Acknowledgements

The County Leitrim Wetlands Field Survey 2021 (LEWS2021) was made possible through the financial support of Leitrim County Council and The Heritage Council and Department of Housing, Local Government and Heritage. The project is an action of the County Leitrim Heritage Plan 2020-2025.

The authors wish to thank Sarah Malone, Heritage Officer with Leitrim County Council for help and advice during the project.

We also acknowledge the assistance of all those landowners who facilitated access to their land during this survey and provided valuable local information.

The project is an action of the County Leitrim Heritage Plan 2020-2025 funded under the National Biodiversity Action Plan Fund 2021

Executive Summary

- 1. The aim of the Leitrim Wetlands Field Survey 2021 (LEWS 2021) was to undertake a field survey of a selection of wetland sites previously identified during the 2019 Counties Leitrim Wetland Survey project (Foss *et al.* 2019) for which little or no ecological information was available.
- 2. Thirty four sites selected for survey included those that lie outside of designated areas but were deemed likely to contain habitats of biodiversity interest, located in the southern part of the county.
- 3. Field surveys were undertaken on all 34 sites. These were surveyed in detail and site descriptions, conservation evaluation and habitat maps were prepared.
- 4. For the sites surveyed in detail, habitats were classified and mapped according to the Guide to Habitats published by The Heritage Council (Fossitt 2000). Habitats that occur surrounding each wetland site were also recorded.
- 5. Detailed survey information on sites, including the habitats and species present, as well as threats and impacts to sites, was stored within a Leitrim Wetland Survey (LEWS) database.
- 6. The information collected from the survey was used to update the 2019 Leitrim Wetlands Map (LEWM) GIS dataset and site database. Site records were updated for each of the wetland sites surveyed in 2021.
- 7. The main findings to emerge from the 2021 wetlands survey is the identification of a number of important wetland sites (ranging from national to high local importance), including a turlough, transition mires, lake and reed swamps, and a number of remnant raised bog sites.
- 8. The results of the 2021 field survey suggests that many important wetland sites may remain unidentified throughout county Leitrim and further surveys will be required to improve our knowledge of the county's wetland heritage.
- 9. Despite the recognised importance and value of wetlands, survey results confirm that they continue to be threatened and lost due to land-use pressures. A series of recommendations are made with regards ensuring the future conservation of the rich wetland heritage of County Leitrim.

1 Introduction and Background

In 2019 Leitrim County Council funded the production of a county Leitrim wetland GIS dataset and associated site database holding information on all known and potential freshwater wetlands in county Leitrim (Foss et al. 2019).

The Leitrim Wetlands Map (LEWM) project in 2019 identified more than 388 areas of wetlands which were mapped in a digital dataset (LEWM GIS dataset). Of the sites mapped in the Leitrim Wetlands Map (LEWM) 2019 project in 269 has no detailed background survey information.

The main aim of the current Leitrim Wetlands Field Survey 2021 (LEWS 2021) project was to carry out a survey of a selection of sites identified in the LEWM 2019 project, located principally in the southern part of the county, for which there was little or no site survey information, and assess their ecological status with the view of improving the knowledge of the wetland resource of County Leitrim.

The outputs of the Leitrim Wetlands Field Survey 2021 should assist Leitrim County Council in its obligations to protect the most important wetlands within the county and inform future conservation policies in relation to wetlands in county Leitrim.

1.1 Project summary

This LEWS 2021 project was undertaken between July and end of October 2021. Field surveys were completed during September 2020. The main elements project included:

- Thirty eight potential survey sites were selected from the Leitrim Wetlands Map (LEWM) GIS dataset for survey in 2021. Sites considered representative of the more common wetland habitats within the county were included (see Table 1).
- Following the site selection process, field maps of the sites were prepared.
- A Wetland Survey Database (LEWS), to hold survey information on sites examined in detail, was created. This database was linked to the original County Leitrim Wetlands Map (LEWM) site database where core information on wetland sites is held. Once survey information was inputted to the LEWS survey database, a complete site report was produced from data held within the two related databases.
- Field surveys of thirty four sites were undertaken during September 2021. Following the field survey, the ecological value of each site was assessed using an objective site evaluation scheme. Sites were subsequently ranked in terms of their local, national, or international conservation value (see Appendix 1).
- Information gathered during the field survey was used to populate the Wetland Survey Database (LEWS), prepare habitat maps, and update the Leitrim Wetlands Map (LEWM) GIS dataset.
- Individual site reports (which include site descriptions, habitat maps, and conservation recommendations) were prepared for each site surveyed. These site reports are included in Appendix 2 of this report.
- Digital copies of the updated Leitrim Wetlands Field Survey 2021 (LEWS 2021) GIS dataset and site database accompany this report.

2 Materials & Methods

2.1 Leitrim Wetlands Field Survey 2021 - Site Selection

At project commencement eleven sites located in the southern part of the county were selected from the Leitrim Wetland Map (LEWM) GIS dataset for survey. The selection of thirty four sites was determined based on the budget and resources made available for the project. The final list of sites proposed for survey was considered representative of the more common wetland habitats within the county.

Sites selected for survey are listed in Table 1 below and a map showing their distribution throughout the county is presented in Figure 1.

2.2 Leitrim Wetlands Field Survey 2021 - Field Survey

The field survey was undertaken during mid-September 2021. The following was recorded at each site:

- General ecological description of the site
- Photographic record of the site
- The habitats both within and immediately adjoining the wetland
- Habitat types listed under Annex I of the EU Habitats Directive
- Threats/damaging activities to the site
- Flora and fauna species observed

All site information was recorded using a standard field survey card on a GPS enabled field computer (see Foss et al. 2019 for details). The survey card was designed specifically for use on this survey.

Plant identification followed Webb et al. (1996), and species nomenclature follows Scannell & Synnott (1987). Searches for rare or protected species of plants (Curtis & McGough 1988) were not the focus of this study but where these were observed note was taken for inclusion in the database.

Mammals observed were recorded using nomenclature in Sterry (2004) and birds were identified using Ferguson-Lee et al. (1983). Any reptiles, amphibians or (readily identifiable) invertebrates were also noted.

Information on threats and damage on the site, and the severity of this was also noted and were marked in the GIS using target notes.

2.2.1 Consultation with Landowners

Where possible, landowners were consulted by calling to the nearest dwelling, and permission was sought for access to the site. Discussions with landowners typically included an explanation of the project often followed by an informal conversation about the particular wetland site and its past and recent management.

All landowners that were approached during the survey permitted access to their lands.

2.2.2 <u>Habitat Classification</u>

The habitats within each wetland visited and those immediately adjacent to the site were classified using Fossitt (2000) 'A Guide to Habitats in Ireland'. The habitat definitions and terminology used in this report follows this guide.

Guidance in determining whether or not a habitat type present within a wetland may correspond to an EU Annex I type was sought from a variety of sources including European Commission (2013), Fossitt (2000), Foss (2007), O'Neill *et al.* (2013), Perrin *et al.* (2013), and Corbett (2004).

2.2.3 <u>Site Conservation Assessment & Evaluation</u>

Each wetland surveyed in the field was assigned an evaluation rating. This evaluation was based on the criteria outlined in Appendix 1 (NRA 2009).

2.2.4 Survey Constraints

The presence of bulls, security fencing, high barbed wire fencing, high water levels, and wide deep drainage ditches hindered field work by preventing safe access to parts of some of the sites. Such areas were assessed using binoculars. Areas that were inaccessible were marked in the GIS using target notes.

The main purpose of the project is to create an inventory of wetlands within the county. In order to assess sites within the time and budgetary constraints of the project, surveys were normally confined to only those parts of the sites that appeared, from the aerial photography, to be of most interest. The level of information gathered at each site was sufficient to evaluate its ecological importance and wetland interest.

Full walkover surveys of five sites were not possible due to access difficulties (LOUGH NAHOO cNHA (Site 56), ARDMEENAN LOUGH cNHA (Site 6), DRUMARD LOUGH (Site 91), CORRACAR (site 189) and KILMADDAROE LOUGH (site 159)).

The first three sites were surveyed visually from a distance with the use of binoculars and an un-manned aerial vehicle (UAV). These surveys allowed for a sufficient level of survey considering the dominant habitats type and land-use.

2.3 Leitrim Wetlands Field Survey Database – Structure and Content

A Leitrim Wetland Survey (LEWS) database holds survey data on sites from the present survey. This database was connected to the existing County Leitrim Wetland Map site database (which holds general and descriptive site data recorded in various third party reports and datasets) via the unique site code assigned to each site. This database was created using Filemaker Pro software package which allows data export to Excel spreadsheets.

Fields used to store survey data in the LEWS database are detailed in Foss et al. (2019).

Initially the sites selected for survey had a site record created in the LEWS survey database. This updated version of the LEWS survey database (with the sites surveyed in 2021 added) was given the name Leitrim Wetland Map Version 1, and is included with this report as part of the final project deliverables.

2.4 Leitrim Wetlands Field Survey (LEWS) – GIS Dataset

The Leitrim Wetland Map (LEWM) GIS dataset created by Foss *et al.* (2019) (using ArcView 10.6 GIS software package on a Windows Operating System) was used throughout the LEWS 2021 for all site selection and mapping purposes.

See Foss et al. (2019) for further details on the structure and format of this LEWM GIS dataset.

All habitat maps produced during the LEWS 2021 project were added to this LEWM GIS dataset. In certain cases boundaries were also adjusted on sites based on field observations. The updated and revised version

of the LEWM GIS dataset was delivered at the end of the project to Leitrim County Council, dated November 2020. A set of GIS files relevant only to this individual survey (LEWS 2021) are also included with this report.

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3 Results

3.1 Leitrim Wetlands Field Survey 2021

The thirty four sites visited during the field survey are listed in Table 1 and their locations are shown in Figure 1.

Section 3.2 below presents the summary findings of the survey in relation to the habitats recorded on each site. In addition, the ecological evaluation of sites is discussed.

A detailed report of each site (sorted according to site name) together with habitat maps are presented in Appendix 2 of this report.

Table 1: List of sites surveyed during the Leitrim Wetlands Field Survey 2021.

LEWS Site Code	LFWS Site Name	IG Easting	IG Northing
LE150	ACRES LOUGH	196705	309884
LE231	AGHAKILCONNELL LOUGH	201716	304546
LE115	ANNAGHMACULLEN LOUGH	214683	299647
LE6	ARDMEENAN LOUGH cNHA	215000	309800
LE157	BRAN LOUGH	196295	302807
LE97	BOG LOUGH COMPLEX	204995	291876
LE158	CARRICKEVY LOUGH	196059	303598
LE198	CARRIGALLEN LOUGH	222989	303308
LE94	CLOONBONIAGH LOUGH	206247	292857
LE87	CLOONCAHIR BOG	208839	294628
LE274	CLOONE LOUGH	216006	303311
LE99	CLOONTURK CLOONCORLY	205623	290722
LE189	CORRACAR	223068	308730
LE253	CORRAWALEEN MULLAGHBOY BOG AND WOODLAND	219052	307935
LE73	DERREEN BUNNY MORE UPPER CUTOVER	203003	298862
LE91	DRUMARD LOUGH	208943	292924
LE154	DRUMGORMAN LOUGH	196264	308090
LE114	DRUMHALLAGH AND CLOONE LOUGH WETLAND	213609	299594
LE191	DRUMLEEVAN WEST	223359	307630
LE199	GANGIN AND MOSYS LOUGHS	223894	302720
LE277	KILLYLEA LOUGH AND WETLAND	213919	301064
LE159	KILMADDAROE LOUGH	197681	301833
LE192	LAHEEN LOUGH	226008	307178
LE57	LEITRIM TURLOUGH cNHA	197583	304249
LE8	LOUGH ANNAGHMACONWAY cNHA	213200	299700
LE220	LOUGH MOREOGE	207820	309691
LE184	LOUGH NACARRIGA	207221	310322
LE56	LOUGH NAHOO cNHA	181280	332140
LE252	MULLAGHBOY LOUGH	218102	309195
LE207	MULLANADARRAGH LOUGH	221233	301441
LE64	ROSSBEG TOOMAN BOG	211508	288433
LE155	SHEEMORE WOOD AND LAKE - SHEEMORE WOOD pNHA	199443	304955
LE118	SUNNAGH MORE EAST BOG	217068	297858
LE299	WILLOWFIELD LOUGH	213851	310922

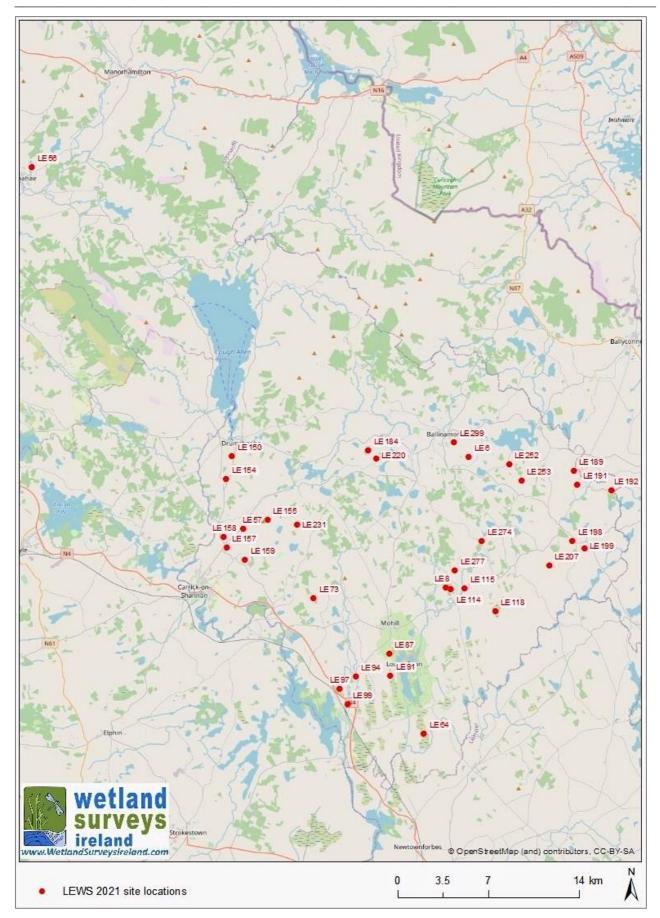


Figure 1: Location of sites selected for survey as part of the Leitrim Wetlands Field Survey 2021.

3.2 Wetland types recorded during LEWS Field Survey 2021

Thirty four sites were surveyed as part of the LEWS 2021. The habitats present (both wetland and non-wetland) within and surrounding each wetland site were recorded using Fossitt (2000) based on field survey observations. Summary descriptions of these wetland types, with examples of where they can be seen in County Leitrim is provided in Foss *et al.* (2019), while more detailed habitat descriptions with characteristic species is given in Fossitt (2000).

Wetland habitats recorded during the survey included a wide range of habitats of varying ecological importance. The most notable habitats that were encountered included; raised bog, mesotrophic lake, wet woodland, transition mire, reed swamp and a potential turlough site. Wetlands of lower ecological interest that were recorded during the survey included reclaimed cutover bog and reed swamp.

A summary description of each site surveyed is presented in Table 2 below. Further site details are presented in detailed site reports are presented in Appendix 2.

Table 2: Summary description of sites surveyed during the Leitrim Wetlands Field Survey 2021.

LEWS Site Code	LEWS Site Name	Survey site location	Site Description
LE150	ACRES LOUGH	Acres lake is located at Drumshanbo and is located along the Lough Allen canal. Site includes various visitor facilities including a floating boardwalk through the wetland.	Small lake located on the Lough Allen canal, the lake edge supports an extensive area of reed and large sedge swamps. An amenity boardwalk passes through the reedswamp.
LE231	AGHAKILCONNELL LOUGH	Small lake that is largely terrestrialised by reed swamp located 8.5km east of Carrick-on- Shannon.	Small lake surrounded by tall extensive Phragmites dominated reed swamp. <i>Carex rostrata</i> becomes more dominant towards the lake edge which is defined by Typha latifolia. Not possible to get view of lake due to extent of reed swamp and wet ground conditions.
LE115	ANNAGHMACULLEN LOUGH	Small reed swamp located 6.5km north-east of Mohill.	Small wetland dominated by very dense Phragmites australis reed swamp. Small area of willow scrub occurs in the central area. Survey undertaken from a distance due to deep water and inaccessible swamp. Unable to determine any presence of open water.
LE6	ARDMEENAN LOUGH CNHA	Lake with extensive wetland approximately 1km south of Ballinamore. Lake surrounded by agriculural lands and conifer forestry plantations.	Large mesotrophic lake with extensive transition mire surrounding the open water. In places Phragmites australis becomes dominant forming reed swamp. Wet willow woodland occurs in the western part of the site. Historic drain discharges to the south. The rare <i>Carex aquatilis</i> was found in the fen vegetation at the lough in 1988 by Ó Críodáin.
LE157	BRAN LOUGH	Bran Lake is located ca 5km north-east of Carrick-on-shannon. The lake is bordered by the R280 road along the western side.	Lake surrounded by narrow band of reed swamp which extends from the lake edge at northern end. Reed swamp is dominated by Schoenoplectus lacustris with Sparganium erectum, Phragmites australis and Typha latifolia. Lake is used for coarse angling with one active fishing platform remaining.

LEWS	LEWS Site Name	Survey site location	Site Description
Site Code			
			A deep drainage channel exits the site to north. Exposed rock outcrop forms lake edge at the northwest.
LE97	BOG LOUGH COMPLEX	Lake surrounded by largely abandoned cutover approximately 2km north of Dromod.	Lake surrounded by abandoned cutover. The lake has a narrow fringe of emergent reed swamp with wet alder willow woodland. The former cutover is largely dominated by dry birch woodland. Small open areas used in the past for peat cutting are colonised by wet grassland vegetation. Peat has been extracted from excavations within past five years.
LE158	CARRICKEVY LOUGH	Small lake locared ca 5km northeast of Carrick-on-Shannon on eastern side of main road R280.	Mesotrophic lake with narrow band of fringing reed swamp. Extends into wet grassland at western side, to the north is agricultural grassland on moderate slope. Small extent of rocky shore at eastern end. No fishing or amenity use. River outlet at eastern end of lake.
LE198	CARRIGALLEN LOUGH	Lake located at Carrigallen village. Site used for coarse fishing with facilities provided.	Large open water lake with narrow band of reed swamp vegetation, elevated farmland and residential developments surround the site. A small area of alder and willow woodland occurs along the northern lake edge.
LE94	CLOONBONIAGH LOUGH	Mesotrophic lake located 5.91km north east of Roosky.	Mesotrophic lake surrounded by narrow fringe of reed swamp. Small area of wet woodland on island near southern shore. Wet grassland occurs in low lying areas surrounding lake. Elsewhere surrounding the lake is proved agricultural grassland occurs. Coarse fishing is promoted at the lake.
LE87	CLOONCAHIR BOG	Raised bog site located 2.2km due south of Mohill.	Main intact raised bog area occurs in east of the site and is dominated by degraded raised bog. Eastern bog includes area of active peat cutting in the north. A track running north-south divides the site in the west with further smaller cutover bog area. Recent peat cutting undertaken on the site in the last 5 years.
LE274	CLOONE LOUGH	Lake and associated wet grassland area located approximately, 8.3km south of Ballinamore.	This mesotropic lake is surrounded by a narrow fringe of reed swamp with willow dominated scrub and woodland occurring amongst the swamp to the north of the lake. A good example of species rich wet grassland occurs to the south of the lake.
LE99	CLOONTURK CLOONCORLY	Remnant raised bog and cutover occurring alongside N4 3.67km north of Roosky.	Small area of remnant high bog with typical raised bog communities. This is surrounded by more extensive abandoned cutover that is dry and intensively drained. Regeneration of dry gorse, birch, and bracken with tall heather in places. Mature dry Birch woodland extends throughout much of the cutover. Wet grassland and <i>Phalaris arundinacea</i> reed swamp occur alongside river in northern part of site.
LE189	CORRACAR	Wet woodland located 2.4km south-east of Newtowngore. Site was surveyed visually from a distance due to access difficulties.	Birch dominated woodland occurring on peat with abundance of willow. Surrounded by improved grassland and conifer plantation.

LEWS	LEWS Site Name	Survey site location	Site Description
Site Code		ourse, one recation	0.10 Desart, p. 10.11
LE253	CORRAWALEEN MULLAGHBOY BOG AND WOODLAND	Linear degraded raised bog located within a valley approximately 6.6km south of Ballinamore.	This remnant raised bog has been subject to historic peat cutting. The site is no longer used for peat extraction. The drainage is continuing to have an effect on the site. Typical bog vegetation continues to dominate the site with <i>Calluna vulgaris, Erica tetralix, Molinia caerulea, Eriophorum</i> spp, and Sphagnum all abundant. A road crosses the site in the northern section and a gravel yard occurring on built lands occurs in the south.
LE73	DERREEN BUNNY MORE UPPER CUTOVER	Cutover bog located 3.8km north-east of Drumsna.	Small cutover bog surrounded by forestry and agricultural grassland. No high bog remaining. Much of the site colonised by dry species poor birch woodland and gorse scrub. Mix of acid wet grassland (<i>Molinia, Succisa, Potentilla</i>) and bog communities occur in open areas of more recent cutover.
LE91	DRUMARD LOUGH	Small mesotrophic lake located 3.8km due south of Mohill.	Small mesotrophic lake with abundant floating macrophytes. Open water surrounded by extensive stands of <i>Phragmites</i> reed swamp surrounding. At southern end of site willow woodland forms a zone adjacent to reed swamp with bog woodland on cutover.
LE154	DRUMGORMAN LOUGH	Lake located 2 km north of Leitrim village along R207 which forms eastern boundary.	Narrow linear mesotrophic lake with narrow band of emergent vegetation dominated by <i>Schoenoplectus lacustris</i> with <i>Menyanthes trifoliata</i> and <i>Equisetum fluviatile</i> . Wet grassland occurs along lake shore in places. Lake used for coarse angling. On eastern site a narrow band of acid Molinia dominated wet grassland occurs together with a treeline of willow.
LE114	DRUMHALLAGH AND CLOONE LOUGH WETLAND	Amenity park located nearby Cloon, County Leitrim. Bóthar Na Naomh is a short looped walk at the village of Cloone. The total length of available trails is 5.75 km.	Amenity park with mesotrophic lake and extensive areas of historic cutover bog colonised by birch woodland and reed swamp.
LE191	DRUMLEEVAN WEST	Wet woodland site on likely former cutaway located at Drumleevan.	Woodland is dominated by mature birch at southern end with some ash around the periphery. The woodland is heavily drained and has an understorey dominated by nettle and bramble. Further north there is an abundance of willow which forms dense stands.
LE199	GANGIN AND MOSYS LOUGHS	Two adjacent lakes with surrounding wetland habitats located just south-east of Carrigallen.	Two similar mesotrophic lakes with floating macrophytes and a narrow band of Phragmites reed swamp. Wet grassland occurs in the low lying areas surroundings the lake, while intensive agriculture is practiced on the more elevated lands in the surroundings.
LE277	KILLYLEA LOUGH AND WETLAND	Lake and wet woodland complex located 6km east of Mohill.	This lake is surrounded by a narrow band of Phragmites australis red swamp. The lake is used for coarse fishing with access from the main road. An extensive area of willow woodland occurs to the south, part of which has been subject to infilling.
LE159	KILMADDAROE LOUGH	Large lake located 4km	Large lake is surrounded by narrow reed fringe with

LEWS	LEWS Site Name	Survey site location	Site Description
Site Code			
		east of Carrick-on- Shannon.	Schoenoplectus lacustris and extensive wet peaty grassland and scattered low willow scrub to the southwest. Drainage works were recently completed in peaty grassland area.
LE192	LAHEEN LOUGH	Lake with fringing wetland and woodland located on the County Cavan/ ILeitrim border ca 4.8km north-east of Carrigallen.	Mesotrophic lake with some floating water lilies and emergent Phragmites reed swamp. A river exits the site at the southern end. Well established willow and alder woodland surrounds much of the lake and grades into drier woodland further up slope. Extensive marsh and wet grassland surrounds much of the lake to the northern side.
LE57	LEITRIM TURLOUGH CNHA	Large fluctuating lake located 2km east of Leitrim village.	Fluctuating lake with extensive reed swamp dominated by <i>Schoenoplecrus lacustris</i> . Towards margin of basin <i>Sparganium erectum</i> is dominant. Abrupt margin to wet grassland habitat. Although little zonation present and high September water level the lake does flood somewhat in winter suggesting the site has some affinity to turlough.
LE8	LOUGH ANNAGHMACONWAY CNHA	Lake located within amenity park at Cloon, County Leitrim.	Mesotrophic lake with fringing reed swamp and a small area of willow woodland. The lake is used for fishing and there is a wide range of visitor amenities including a bird hide. Agricultural grassland occurs to the west of the lake.
LE220	LOUGH MOREOGE	Small lake in rural setting located 6.2km northwest of Ballinamore.	A small lake in natural setting. Lake is surrounded by non-intensively managed farmland to north, east, and west. To the south is a public road and adjoining mature conifer plantation. Adjacent to forestry. Extensive Phragmites reed swamp and wet willow woodland surrounds the lake.
LE184	LOUGH NACARRIGA	Large lake with very narrow fringe of reed swamp located 6.4km north-west of Ballinamore.	Large open water lake surrounded by a narrow stand of <i>Schoenoplectus lacustris</i> . The lake edge is bounded by intensively managed agricultural lands to the west and south. A public road passes the site along its eastern boundary. The lake itself supports a range of water birds including Great-crested Grebe, Coot, and Cormorant.
LE56	LOUGH NAHOO cNHA	Fluctuating lake with extensive transition mire and marginal wetlands within nom-intensively managed farmland landscape ca 2 km to the west of Dromahair.	The site is a combination of swamp, Alluvial woodland and Transition mire. Fluctuating lake with extensive wetland habitat extending to the west. Transition mire dominated by <i>Equisetum</i> and <i>Carex rostrata</i> is extensive with pockets of willow scrub. Species rich wet grassland surrounds the wetland habitat and local groundwater seepages support fen type communities.
LE252	MULLAGHBOY LOUGH	Lake with birch woodland located 5km south of Ballinamore.	Lake with extensive floating macrophytes and narrow fringe of Typha latifolia. A small area of birch dominated woodland occurs at the northern extent of the site. This appears relatively dry underfoot due to past drainage. Part of the site to the north has recently been planted with conifers.
LE207	MULLANADARRAGH LOUGH	Lake with fringing reed swamp and wet woodland located approximately 3km south of Carrigalin.	Mesotrophic lake surrounded by narrow fringe of Phragmites reed swamp. Wet woodland extends around much of the lake edge. At the eastern side of the lake, transitions occurs adjacent to agricultural grassland.

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LEWS Site	LEWS Site Name	Survey site location	Site Description
Code			
LE64	ROSSBEG TOOMAN BOG	Intact raised bog ca 6.3km east of Roosky.	Large linear expanse of raised bog, largely remaining intact. The bog surface has a good cover of Sphagnum mosses and typical raised bog communities. In places pools have dried out suggesting drainage effects from marginal historic peat cutting. Cutover is now abandoned and regenerating with peatland vegetation and drier scrub where water table is low.
LE155	SHEEMORE WOOD AND LAKE - SHEEMORE WOOD pNHA	Lake occurring within a larger complex of wetland and dry land habitats located 6.5km east of Carrick-on-Shannon.	The wetland interest of the site includes a small mesotrophic lake with floating water lillies, a narrow fringe of reed swamp, and a small transition mire that shows signs of degradation due to drainage. The transition mire is dominated by <i>Carex rostrata</i> with abundant <i>Menyanthes trifoliata</i> , <i>Equisetum fluviatile</i> , and <i>Comarum palustre</i> .
LE118	SUNNAGH MORE EAST BOG	Degraded raised bog located 8km to the south-west of Carrigallen.	Extensive raised bog much of which has been subject to past cutting and drainage. The open bog supports abundant heather with Molinia and Myrica gale common. Birch has become established alongside historic drains. The cutover is regenerating with a mix of dry and wet bog communities.
LE299	WILLOWFIELD LOUGH	Small lake that is largely terrestrialised located ca 1km southeast of Ballinamore.	Small terrestrialising lake with open water dominated by floating macrophytes. The lake is surrounded by reed swamp dominated by common reed (Phragmites australis) and greater tussock sedge (Carex paniculata). Accessible through right of way at southern extent of site, local resident suggested that the lake was formerly used for coarse fishing.

3.3 Floral Observations

Floral observations and records made on the sites surveyed are included in the LEWS database. Plant species lists for each site surveyed are included in the site reports presented in Appendix 2.

The following record of problematic invasive alien species is of note:

Canadian pondweed (*Elodea canadensis*) – invasive species. Found at one site in the lake at ACRES LOUGH. Recommendations are made in the site report to eradicate this invasive non-native species.

3.4 Faunal Observations

Faunal observations and records made on the sites surveyed are included in the LEWS database. Species lists for each site surveyed are included in the site reports presented in Appendix 2.

The following noteworthy species are of note:

Larval webs of the EU Habitats Directive Annex II species Marsh Fritillary (*Euphydryas aurinia*) were recorded at two sites (ACRES LOUGH and DERREEN BUNNY MORE UPPER CUTOVER) during the 2021 survey, which occur in 10km grid square G90 and N09 respectively.

Survey time limitations did not allow for a detailed survey of the distribution and abundance of Marsh Fritillary larval webs within the two sites where it was recorded, although extensive areas of suitable habitat were noted. Additional surveys of this species are recommended at a more suitable time of the year (ideally September), and should future surveys identify significant resident or regularly occurring populations, then the conservation ranking of these sites may need to be reviewed.

Marsh Fritillary data records for the two sites have been submitted to the National Biodiversity Data Centre.



At a further site, BOG LOUGH COMPLEX abundant suitable habitat for Marsh Fritillary was also observed. A Marsh Fritillary survey is recommended at this site, which also occurs 10km square N09.

Recommendations are made in the site report to undertake Marsh Fritillary survey on suitable habitat with abundant food plant during the appropriate time of the year.

Plate 1: Marsh Fritillary larval web from cutover bog area at DERREEN BUNNY MORE UPPER CUTOVER.

3.5 Site Conservation Assessment

On completion of the LEWS 2021 field survey, each of the thirty four sites were reviewed and given a site conservation rating using the criteria presented in Appendix 1 (from NRA 2009). The site conservation rating for sites surveyed during 2021 is presented in Table 3 below.

Three sites LOUGH NAHOO cNHA, ARDMEENAN LOUGH cNHA and ROSSBEG TOOMAN BOG were deemed to be of International conservation value due to the presence of extensive areas of high quality transition mire habitat, a relatively rare occurrence in County Leitrim, and active raised bog habitat.



Plate 2: Transition mire habitat at ARDMEENAN LOUGH cNHA.

One sites SHEEMORE WOOD AND LAKE - SHEEMORE WOOD pNHA were deemed to be of national conservation value due to the presence of transition mire habitat.

Twenty five sites are of County conservation value (C+) due to the occurrence of good quality habitats including mesotrophic lakes, reed and tall herb swamp, degraded raised bog and wet woodland.

One sites (CLOONTURK CLOONCORLY) was deemed to be of local high local conservation value (C). The remaining sites surveyed during the LEWS 2021 had a lower local conservation ranking.

Table 3: Conservation evaluation of sites surveyed during the LEWS 2021. Sites are ranked according to their conservation value.

LEWS Site	Site Name	Site Wetland	Presence of EU Annex Habitats
Code		Conservation Ranking	
LE56	LOUGH NAHOO cNHA	A Rating: Internationally Important	This site contains excellent example of 7140 Transition mires and quaking bogs which is a habitat listed under Annex I of the EU Habitats Directive. Some of the areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).
LE6	ARDMEENAN LOUGH CNHA	A Rating: Internationally Important	This site contains excellent example of 7140 Transition mires and quaking bogs which is a habitat listed under Annex I of the EU Habitats Directive.
LE64	ROSSBEG TOOMAN BOG	A Rating: Internationally Important	Annex 1 habitat Active Raised Bog (7140) is likely to be present in small areas towards centre of bog. Parts of the site may also correspond to the EU Annex 1 habitat Depressions on peat substrates of the Rhynchosporion (7150). The remainder of the site correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.
LE155	SHEEMORE WOOD AND LAKE - SHEEMORE WOOD pNHA	B Rating: Nationally Important	Transition mire that shows signs of degradation due to drainage, relatively dry and firm underfoot. Some of the areas of transition mire within the site may correspond to the EU Annex I habitat 7140 Transition Mires and Quaking Bogs.
LE8	LOUGH ANNAGHMACONWAY CNHA	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE57	LEITRIM TURLOUGH CNHA	C+ Rating: County Conservation value	Unclear whether this site is Annex 1 EU habitat turlough. Fluctuating lake, water level appear not to retreat much. Little zonation.
LE87	CLOONCAHIR BOG	C+ Rating: County Conservation value	Site contains 7120 Degraded raised bogs still capable of natural regeneration, with submarginal community complexes dominating.
LE91	DRUMARD LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE94	CLOONBONIAGH LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE97	BOG LOUGH COMPLEX	C+ Rating: County Conservation value	Areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).
LE114	DRUMHALLAGH AND CLOONE LOUGH WETLAND	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE118	SUNNAGH MORE EAST BOG	C+ Rating: County Conservation value	Parts of the site may also correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.
LE150	ACRES LOUGH	C+ Rating: County	Areas of tall herb swamp within site correspond

LEWS Site Code	Site Name	Site Wetland Conservation Ranking	Presence of EU Annex Habitats
		Conservation value	to the EU Annex I habitat 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels.
LE154	DRUMGORMAN LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE157	BRAN LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE158	CARRICKEVY LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE159	KILMADDAROE LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE184	LOUGH NACARRIGA	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE192	LAHEEN LOUGH	C+ Rating: County Conservation value	Areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).
LE198	CARRIGALLEN LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE199	GANGIN AND MOSYS LOUGHS	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE207	MULLANADARRAGH LOUGH	C+ Rating: County Conservation value	Areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).
LE220	LOUGH MOREOGE	C+ Rating: County Conservation value	Areas of wet willow woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).
LE231	AGHAKILCONNELL LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE252	MULLAGHBOY LOUGH	C+ Rating: County Conservation value	It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.
LE253	CORRAWALEEN MULLAGHBOY BOG AND WOODLAND	C+ Rating: County Conservation value	Parts of the site may also correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.
LE274	CLOONE LOUGH	C+ Rating: County Conservation value	Wet willow woodland may correspond with EU Annex I habitat 91EO Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).
LE277	KILLYLEA LOUGH AND WETLAND	C+ Rating: County Conservation value	Wet willow woodland may correspond with EU Annex I habitat 91EO Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

LEWS Site Code	Site Name	Site Wetland Conservation Ranking	Presence of EU Annex Habitats
LE299	WILLOWFIELD LOUGH	C+ Rating: County	It is not thought that any of the habitats present
		Conservation value	within this site correspond to a habitat listed
			under Annex I of the EU Habitats Directive.
LE99	CLOONTURK CLOONCORLY	C Rating: Local	Parts of the site may also correspond to the EU
		conservation value (high	Annex 1 habitat 7120 Degraded raised bogs still
		value)	capable of natural regeneration.
LE73	DERREEN BUNNY MORE	D Rating: Local	It is not thought that any of the habitats present
	UPPER CUTOVER	conservation value	within this site correspond to a habitat listed
		(moderate value)	under Annex I of the EU Habitats Directive.
LE189	CORRACAR	D Rating: Local	It is not thought that any of the habitats present
		conservation value	within this site correspond to a habitat listed
		(moderate value)	under Annex I of the EU Habitats Directive.
LE191	DRUMLEEVAN WEST	D Rating: Local	It is not thought that any of the habitats present
		conservation value	within this site correspond to a habitat listed
		(moderate value)	under Annex I of the EU Habitats Directive.
LE115	ANNAGHMACULLEN LOUGH	E Rating: Local	It is not thought that any of the habitats present
		conservation value (low	within this site correspond to a habitat listed
		value)	under Annex I of the EU Habitats Directive

3.6 Threats and Damage to County Leitrim Wetlands

The majority of, if not all, Irish wetland sites, and by extension those in county Leitrim, have been subject to some degree of human impact, damage or modification from their natural state in the past, and continue to be threatened and decline in extent due to ongoing human activities (NPWS 2019; Foss & Crushell 2007; Foss 2007). A summary table of impacts and the wetland types most affected is presented in Table 4 below.

Wetlands, (bog, fen and marsh areas in particular) have historically been regarded as less productive than adjacent agricultural land and measures have been taken to 'improve' their value for agriculture. The principal method of land improvement usually involved one or more of the following; drainage, infill or soil redistribution, burning, and addition of nutrients. These activities were undertaken so as to facilitate the removal of peat, planting of trees, or the creation of new grazing areas, pasture or arable farmland.

Historical evidence indicates that peatlands or bogs, and by extension fens and other associated wetlands, were increasingly utilised by the growing population throughout Ireland. The removal of peat by this growing population resulted in many worked out bogs, which when abandoned became ideal locations for the formation of secondary wetland habitats (fen, marsh and wet woodland *inter alia*).

A more recent trend has been the use of wetlands as areas to dispose of building rubble, rubbish, and landfill materials (Foss & Crushell 2007; Monaghan County Council 2006).

Land conversion and drainage works are ongoing agricultural management techniques which affect the hydrology of wetland habitats.

The 2019 NPWS report on the conservation status of EU Habitat Directive sites in Ireland (NPWS 2019), many of which are wetlands, found that the conservation status of these habitats is far from satisfactory. In fact the overall assessment for inland wetland habitat types listed under the EU Habitats Directive found that only a single habitat was in favourable conservation status, while seven were 'unfavourable - inadequate' and twelve habitat types were deemed to have a 'unfavourable - bad' conservation status

overall (see Figure 2). The trend for the majority of habitats also suggests that their conservation status is in decline during the period 2013-2019 (see Figure 2).

Included in the latter 'unfavourable – bad' conservation status category were habitats such as; oligotrophic and hard water lakes, raised bogs (active and degraded), blanket bogs, wet heath, transition mires, alkaline fens, tall herb swamps, and alluvial wet woodland. These habitats account for a significant part of the wetland habitat resource in county Leitrim.

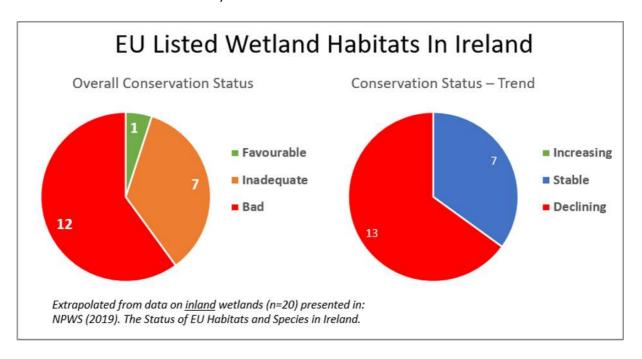


Figure 2: Summary of conservation status reported by NPWS (2019).

Table 4: Natura 2000 Impacts and Activities which are likely to have a negative effect on wetlands, and the wetland type most likely to be affected by these activities.

Natura 2000 Impacts and Activities Main Code	Impacts and Activities Category with brief description	Wetland habitat types most at threat or likely to be affected from Impacts and Activities
Α	Agriculture Including cultivation, fertilization abandonment, and over grazing	Fens, Marsh, Raised bog, Wet heath, Reed swamp, Lake and Lake margins, Wet grassland, Wet woodland, Bog woodland, Rivers
В	Sylviculture, forestry Including fertilisation, planting and re-planting, forestry practices	Fens, Marsh, Raised bog, Wet heath, Reed swamp, Lake and Lake margins, Wet grassland, Wet woodland, Bog woodland, Turlough, Rivers
С	Mining, extraction of materials and energy production Including quarry activities, turbary and peat removal	Raised bog, Dystrophic lake, Bog woodland
D	Transportation and service corridors Including road construction, power transmission	All wetland types
E	Urbanisation, residential and commercial development Including Urban and industrial development, discharges and waste disposal	Fen, Bog, Marsh, Wet Grassland, Scrub
F	Biological resource use other than agriculture & forestry Including leisure fishing, hunting	Lake, Fen, Marsh, River, Bog
G	Human intrusions and disturbances Including recreational facilities, outdoor leisure activities, littering, trampling overuse	Bog, Fen, Marsh, Reed Swamp, Wet Grassland
Н	Pollution Including surface and groundwater water pollution, air pollution	Oligotrophic Lake, River, Marsh, Fen
ſ	Invasive, other problematic species and genes Including invasive species, genetic pollution	Oligotrophic Lake, River, Marsh, Fen
J	Natural System modifications Including landfill, drainage, drain maintenance, water abstraction, burning	Fen, Marsh, Bog, Reed Swamp, Lake margins, Wet grassland, River
К	Natural biotic and abiotic processes (without catastrophes) Including organic material accumulation	Fen, Marsh, Bog, Wet woodland

During the course of the LEWS 2021, different types of damage to wetlands were noted, and an overall assessment of the severity was undertaken where information was available. This was undertaken on all sites surveyed as part of the study. The following scale for the severity of damage used was: Not serious; Serious; Very Serious, and Unknown.

The individual site reports presented in Appendix 2 describe all specific threats or damage and associated severity on each of the wetland sites surveyed. In many cases more than one damaging activity / threat was recorded on an individual site.

In summary, the main activities that are impacting on the conservation interest of wetlands in County Leitrim include; drainage, peat extraction (historic, recent, and on-going), diffuse water pollution, dumping, and invasive non-native species.

4 Conclusions and Recommendations

4.1 Distribution and Extent of the Leitrim Wetland Resource

The results of the LEWS 2021 shows that the main GIS layer which was developed for the identification of potential wetlands in Leitrim (Leitrim Wetland Study, Foss et al. 2019) is a useful tool in identifying wetlands of ecological importance in the county.

Of the thirty four identified in the LEWS project 2019 (Foss et al. 2019) which were surveyed during 2021, most supported wetland habitats of conservation significance.

There is a commitment in the recently published Climate Action Plan (Government of Ireland 2019) to 'upgrade habitat mapping systems to establish the baseline condition of wetlands'. This project is a step towards furthering that national commitment. It is recommended that further inventory work is required throughout the country to adequately address the deficit in baseline data on the extent and condition of wetland habitats.

4.2 Site Designations

It is recommended that all wetland sites which have been identified in this survey, and rated as C+ (of county importance) are forwarded to the National Parks and Wildlife Service (NPWS) for inclusion on their list of sites for survey and possible designation.

4.3 Planning Controls

Sites which are listed as being of county importance (C+), high local importance (C) and of moderate local importance (D) should be highlighted and included in any recommendations made under the County Biodiversity Action Plan or included in local area plans, county development plans or other planning strategies. Again, such recommendations for recognition and listing of sites should be made on a regular basis as further information on the wetland resource of county Leitrim becomes known.

It is recommended that council planners consult with the GIS layers, which indicate potential wetlands in county Leitrim, where a development could adversely affect a wetland – through water abstraction, infilling, drainage, etc.

In the event that an application is made that could potentially impact on these sites, a site visit should be conducted by a suitably qualified ecologist to determine the importance and sensitivity of the area.

It is recommended that council staff should be aware of a variety of issues regarding wetlands when assessing development proposals and planning applications. These include:

- The need for an appropriate buffer zone surrounding wetland sites
- The importance of hydrology in how wetland sites function and how indirect impacts on a wetland system can be caused by activities occurring at some distance from the wetland
- The cumulative effect of seemingly isolated losses of wetland habitats across the county
- The loss of wetland habitats as a result of fragmentation of sites and impacts on wetland hydrology
- The ecological value of wetland habitats adjacent to, and fringing lakes and ponds
- The ecological value of large areas of reed and tall sedge swamps, rivers and river flood plains in controlling and reducing the impacts of flooding events
- The wetland fauna, some of which are listed on Annex II of the Habitats Directive found in the county wetlands and the potential impacts on these species as well as their habitats
- The limited coverage provided in the initial NPWS NHA survey this was never a comprehensive survey of the entire county many sites of high nature conservation value remain undesignated
- The potential value of wetland sites which are outside statutory designated areas and the need for adoption of a precautionary approach when assessing applications that may impact on same.

4.4 Ongoing Maintenance of the County Leitrim Wetland Map Site Database

It is probable that additional third party survey information on wetland sites listed in the County Leitrim Wetland site database exists.

It is recommended that this site data is compiled within the database and that it is kept up to date where possible by collating data from additional surveys, EIS documents, etc. This work needs to be done concurrently with ongoing maintenance of the County Leitrim Wetland Survey GIS dataset and following the naming procedure described in Foss et al. 2019.

4.5 Ongoing Maintenance of the County Leitrim Wetland Map GIS Dataset

Coupled with ongoing updates of the County Leitrim Wetland survey and site database (Foss et al. 2019) it is recommended that the GIS layers are also regularly updated as new information becomes available.

4.6 Hydrological Assessment of Wetland Sites

A hydrological assessment of all sites which have been given a rating of C+ should be commissioned in order to assist in our understanding of the hydrological functioning of these wetlands.

4.7 Management and Restoration of Wetland Sites

Agricultural activities have the potential to adversely affect wetland habitats. Drainage, land reclamation, and enrichment from fertilizer application are among the agricultural activities that were recorded as damaging the integrity of wetland sites in County Leitrim during the current study. It is important that, through appropriate agri-environmental schemes, land management practices in the vicinity of wetland sites recognise the value and sensitivity of wetland ecosystems.

The importance of wetlands in the sequestration of carbon is increasingly recognised. The national Climate Action Plan (Government of Ireland 2019) calls for improved management of peatlands (and other wetlands) and soils. Measures and incentives to re-wet and restore wetland habitats in County Leitrim should be explored. Payment for Results Agri-environmental Schemes such as the successful Burren Programme and other projects (Pearl Mussel Programme, Hen Harrier Project, and RBAPS) provide a good template which could be adapted to targeting improved management of wetland habitats within an agricultural landscape.

4.8 Control of invasive species in wetland sites

It is important that the establishment and spread of invasive species within wetland sites is controlled as they have the potential to adversely affect the biodiversity interest of wetlands, cause serious nuisance and can be very costly and difficult to remove once they become established.

Typical species affecting wetlands include Rhododendron (*Rhododendron ponticum*), Japanese Knotweed (*Fallopia japonica*), Himalayan Balsam (*Impatiens glandulifera*), Fringed Water Lily (*Nymphoides peltata*), and Parrot's Feather (*Myriophyllum aqauticum*). It is recommended that all records of invasive species in County Leitrim are submitted to the Invasive Species Ireland database (http://www.invasivespeciesireland.com/sighting/) where advice on control and removal of species is available.

4.9 Local Authority Wetlands Policy

A review of the statutory provisions that govern the management of wetlands in County Leitrim (such as the Habitats Directive, Wildlife Act, Water Framework Directive, Environmental Liability Directive, Nitrates Directive, Planning Act, etc.) should be conducted and the role of the Local Authority in this regard should be examined. This review could be done in collaboration with other Local Authorities.

Increased co-ordination between agencies in their policy and operative approaches to wetlands need to be strengthened.

4.10 Water Framework Directive

As a member of the European Union, Ireland must, as of the 22nd December 2000 implement the Water Framework Directive (2000/60/EC). This directive provides a consolidated, strengthened framework for the protection and improvement of all of our waters - rivers, lakes, marine and ground waters, and of our water-dependent habitats and species. The aim of the Water Framework Directive is to prevent any deterioration in the existing status of our waters, including the protection of good and high status where it exists, and to ensure that all waters are restored to at least good status by 2015.

The objectives of the WFD are:

• to protect and enhance the status of aquatic ecosystems (and terrestrial ecosystems and wetlands directly dependent on aquatic ecosystems)

- to promote sustainable water use based on long-term protection of available water resources
- to provide for sufficient supply of good quality surface water and groundwater as needed for sustainable, balanced and equitable water use
- to provide for enhanced protection and improvement of the aquatic environment by reducing / phasing out of discharges, emissions etc.
- to contribute to mitigating the effects of floods and droughts
- to protect territorial and marine waters
- to establish a register of 'protected areas' e.g. areas designated for protection of habitats or species

Clearly the identification of wetland habitats in County Leitrim assists in fulfilling not only obligations under the EU Habitats Directive and the National Biodiversity Plan (Department of Culture, Heritage and the Gaeltacht 2017), but also in implementing the Water Framework Directive.

4.11 Public Information and Interpretation

Public awareness about the importance of wetlands in county Leitrim could be developed through a series of targeted measures. These could include:

- Specific events county-wide as part of 'biodiversity week' or 'heritage week' which take place annually. Similarly, World Wetlands Day provides an opportunity to hold public events relating to wetlands (further details are available from http://www.ramsar.org/wwd/wwd index.htm)
- A series of school visits celebrating local wetlands co-ordinated through the Heritage in Schools Scheme
- Public display boards and signage at popular wetland sites
- A workshop on wetland management for landowners and farmers

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Appendix 1

National Roads Authority (2009) Site Evaluation Criteria

Appendix 1: Site Evaluation Criteria

Modified from National Roads Authority (2009). Guidelines for Assessment of Ecological Impacts of National Roads Schemes.

Rating	Importance of Ecological Sites
Α	Internationally important
	Sites designated (or qualifying for designation) as SAC* or SPA* under the EU Habitats or Birds Directives. Undesignated sites containing good examples of Annex I <u>priority</u> habitats under the EU Habitats Directive.
	Sites designated (or qualifying for designation) as SAC* for salmonids or Annex II species under the EU Habitats Directives.
	Major salmon river fisheries.
	Major salmonid (salmon, trout or char) lake fisheries.
В	Nationally important
	 Sites or waters designated or proposed as an NHA* or statutory Nature Reserves.
	 Undesignated sites containing good examples of Annex I habitats (under EU Habitats Directive).
	 Undesignated sites containing <u>significant numbers</u> of resident or regularly occurring populations of
	Annex II species under the EU Habitats Directive or Annex I species under the EU Birds Directive or
	species protected under the Wildlife (Amendment) Act 2000.
	Major trout river fisheries.
	Water bodies with major amenity fishery value.
	Commercially important coarse fisheries.
C+	County value
	Area of Special Amenity.
	Area subject to a Tree Preservation Order.
	Area of High Amenity, or equivalent, designated under the County Development Plan.
	Resident or regularly occurring populations (assessed to be important at the County level) of the following:
	• Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
	Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
	Species protected under the Wildlife Acts; and/or
	Species listed on the relevant Red Data list.
	Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfill
	the criteria for valuation as of International or National importance.
	County important populations of species, or viable areas of semi-natural habitats or natural heritage
	features identified in the National or Local BAP, if this has been prepared.
	Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.
С	High value, locally important
C	Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of
	naturalness, or significant populations of locally rare species.
	Sites containing any resident or regularly occurring populations of Annex II species under the EU Habitats
	Directive or Annex I species under the EU Birds Directive.
	Small water bodies with known salmonid populations or with good potential salmonid habitat.
	Large water bodies with some coarse fisheries value.
D	Moderate value, locally important
	Sites containing some semi-natural habitat or locally important for wildlife.
	Small water bodies with some coarse fisheries value or some potential salmonid habitat.
	Any water body with unpolluted water (Q-value rating 4-5).
E	Low value, locally important
	Artificial or highly modified habitats with low species diversity and low wildlife value.
	Water bodies with no current fisheries value and no significant potential fisheries value.
F	Unknown Value
	Sites of possible ecological value which require further investigation at the optimum season to establish
	importance.
	Sites of possible fisheries value requiring further survey.

^{*} SAC = Special Area of Conservation, SPA = Special Protection Area, NHA = Natural Heritage Area

Appendix 2

Individual site reports from the Leitrim Wetlands Field Survey 2021

Appendix 2: Individual Site Reports from the Leitrim Wetlands Field Survey 2021

Sites are listed in alphabetical order by site name

LEWS Site Code	LFWS Site Name	Page
LE150	ACRES LOUGH	33
LE231	AGHAKILCONNELL LOUGH	38
LE115	ANNAGHMACULLEN LOUGH	43
LE6	ARDMEENAN LOUGH CNHA	48
LE157	BRAN LOUGH	53
LE97	BOG LOUGH COMPLEX	58
LE158	CARRICKEVY LOUGH	63
LE198	CARRIGALLEN LOUGH	68
LE94	CLOONBONIAGH LOUGH	73
LE87	CLOONCAHIR BOG	78
LE274	CLOONE LOUGH	83
LE99	CLOONTURK CLOONCORLY	89
LE189	CORRACAR	94
LE253	CORRAWALEEN MULLAGHBOY BOG AND WOODLAND	99
LE73	DERREEN BUNNY MORE UPPER CUTOVER	104
LE91	DRUMARD LOUGH	110
LE154	DRUMGORMAN LOUGH	115
LE114	DRUMHALLAGH AND CLOONE LOUGH WETLAND	120
LE191	DRUMLEEVAN WEST	125
LE199	GANGIN AND MOSYS LOUGHS	130
LE277	KILLYLEA LOUGH AND WETLAND	135
LE159	KILMADDAROE LOUGH	140
LE192	LAHEEN LOUGH	145
LE57	LEITRIM TURLOUGH cNHA	150
LE8	LOUGH ANNAGHMACONWAY cNHA	155
LE220	LOUGH MOREOGE	160
LE184	LOUGH NACARRIGA	165
LE56	LOUGH NAHOO cNHA	170
LE252	MULLAGHBOY LOUGH	176
LE207	MULLANADARRAGH LOUGH	181
LE64	ROSSBEG TOOMAN BOG	186
LE155	SHEEMORE WOOD AND LAKE - SHEEMORE WOOD pNHA	191
LE118	SUNNAGH MORE EAST BOG	196
LE299	WILLOWFIELD LOUGH	201

Site Name: ACRES LOUGH

Site Code: LE150 Area (ha): 12.32 Grid Ref: 196705 309884 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

13/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

BLACKROCK

Solid Geology:	Subsoil type:
Courceyan limestone	Water
Substrate type:	Substrate stability:
Peat	Quaking

River catchment:

Shannon Upr

CORINE Habitats:

Coniferous forest

Site Location

Acres lake is located at Drumshanbo and is located along the Lough Allen canal. Site includes various visitor facilities including a floating boardwalk through the wetland.

Site Description and Wetland Habitats Recorded

Small lake located on the Lough Allen canal, the lake edge supports an extensive area of reed and large sedge swamps. An amenity boardwalk passes through the reedswamp.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
N1	Fauna	Marsh fritillary web, suitable habitat throughout this field. Survey recommended.

Management Recommendations following survey

Enhance biosiversity interpretation and possible enhancment measures should be explored. Control of invasive species recommended.

Future Survey Recommendations

Marsh fritillary survey recommended amongst suitable wet grassland habitat at site.

Landowner Information Comments

Much of the site is publicly owned land.

Description of potential EU Habitats Directive Annex 1 habitats

Areas of tall herb swamp within site correspond to the EU Annex I habitat 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels.

Main I	Fossitt	habitats	on	site	
--------	---------	----------	----	------	--

BL3 Buildings and artificial surfaces

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FS2 Tall herb swamps

GS4 Wet grassland

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW2 Depositing/lowland rivers

GA1 Improved agricultural grassland

GS4 Wet grassland

WD3 (Mixed) conifer woodland

WD4 Conifer plantation

WL2 Treelines

EU Habitats Directive habitats on site

6430 Hydrophilous tall herb fringe communities of

Landuse / Management Activity	Frequency of use
Boating	

Fishing 1 Rare (<5%)

Walking 3 Frequent (21-50%)
Amenity Management 3 Frequent (21-50%)

Impacting Activity (EU code and title)IntensityImpact101 invasive non-native speciesB = mediumUnknown

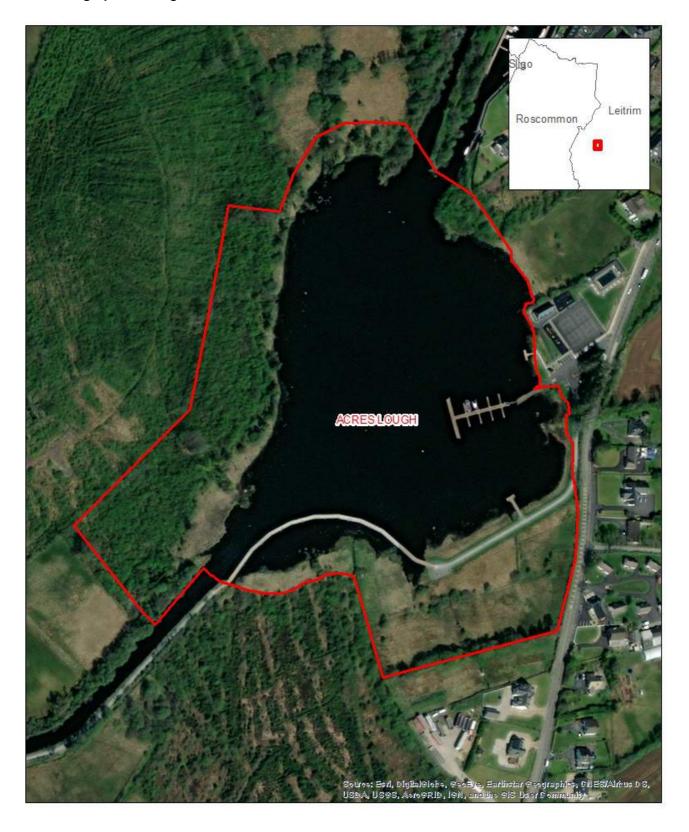
G01.02 walking, horse riding and non-motorised vehicles A = high 0 = neutral

G01.01 nautical sports C = low Unknown

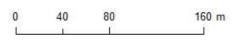
Threats

101 invasive non-native species

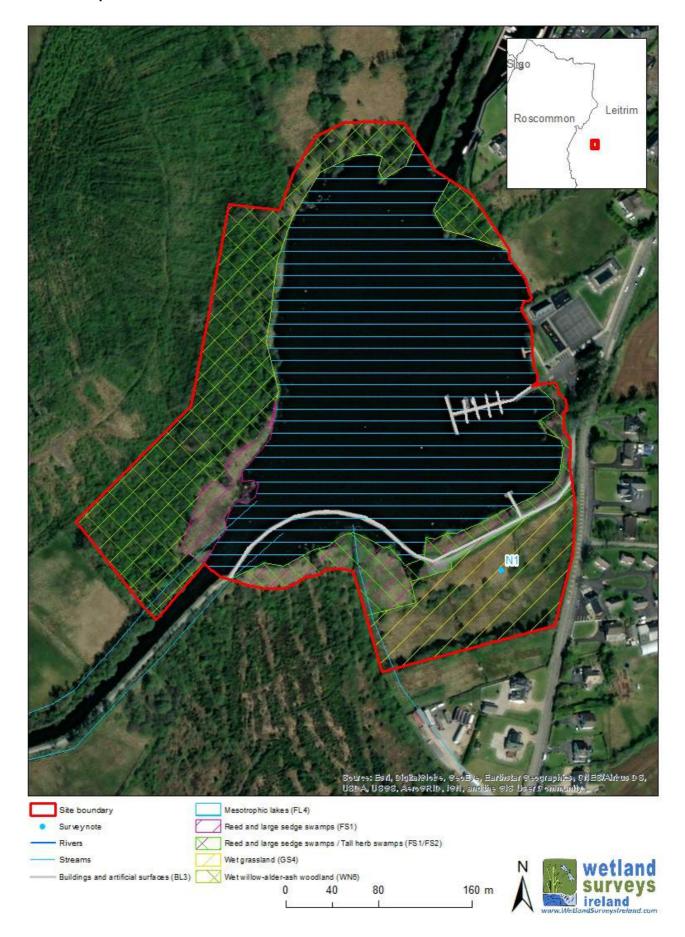
Flora on site - Latin & English species name	
Algae	
Alisma plantago-aquatica	Water-plantain
Alnus glutinosa	Alder
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Carex rostrata	Bottle Sedge
Comarum palustre	Marsh Cinquefoil
Elodea canadensis	Canadian Waterweed
Epilobium hirsutum	Great Willowherb
Filipendula ulmaria	Meadowsweet
Lemna minor	Common Duckweed
Lythrum salicaria	Purple-loosestrife
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Myosotis sp.	Forget-me-not
Nuphar lutea	Yellow Water-lily
Nymphaea alba	White Water-lily
Persicaria sp.	Bistort
Phalaris arundinacea	Reed Canary-grass
Potamogeton crispus	Curled Pondweed
Potamogeton natans	Broad-leaved Pondweed
Salix cinerea subsp. cinerea	Grey Willow
Sparganium erectum	Branched Bur-reed
Typha latifolia	Bulrush
Valeriana officinalis	Common Valerian
Fauna on site - English and Latin species name	
Coarse fish various	NA
Dragon and Damselflies various	
Mallard	Anas platyrhynchos
Marsh Fritillary	Euphydryas aurinia
Small Tortoiseshell	Aglais urticae











Site Name: AGHAKILCONNELL LOUGH

Site Code: LE231 Area (ha): 5.10 Grid Ref: 201716 304546 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

17/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

AGHAKILCONNELL

Solid Geology:	Subsoil type:
Marine shelf facies	Cut
Substrate type:	Substrate stability:
Mineral Soil	Floating mat
Peat	_

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Small lake that is largely terrestrialised by reed swamp located 8.5km east of Carrick-on-Shannon.

Site Description and Wetland Habitats Recorded

Small lake surrounded by tall extensive Phragmites dominated reed swamp. Carex rostrata becomes more dominant towards the lake edge which is defined by Typha latifolia. Not possible to get view of lake due to extent of reed swamp and wet ground conditions.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
N1	General	Lake is being in filled with reed swamp. This process is possibly being enhanced by nutrient enrichment.
N2	General	Not possible to get a clear view of the open water as it gets too wet underfoot. Band of Typha along edge of open water.

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

Friendly landowner facilitated access though his land.

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

EU Habitats Directive habitats on site None noted

Landuse / Management Activity	Frequency of use
-------------------------------	------------------

None

Impacting Activity (EU code and title) Intensity Impact

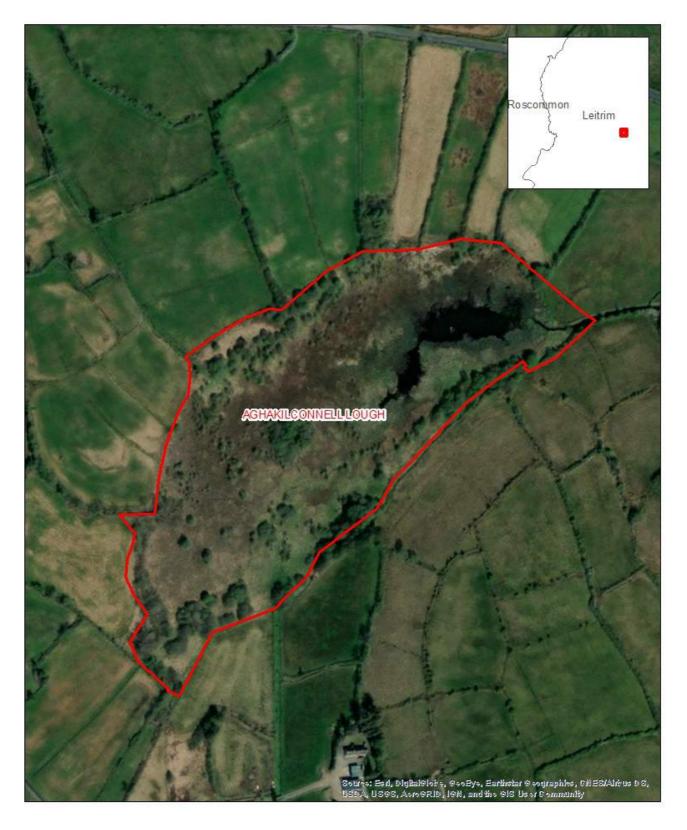
H01.05 diffuse pollution to surface waters due to agricultural and C = low Unknown forestry activities

Threats

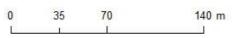
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species name		
Agrostis stolonifera	Creeping Bent	
Angelica sylvestris	Wild Angelica	
Carex rostrata	Bottle Sedge	
Cicuta virosa	Cowbane	
Cirsium palustre	Marsh Thistle	
Comarum palustre	Marsh Cinquefoil	

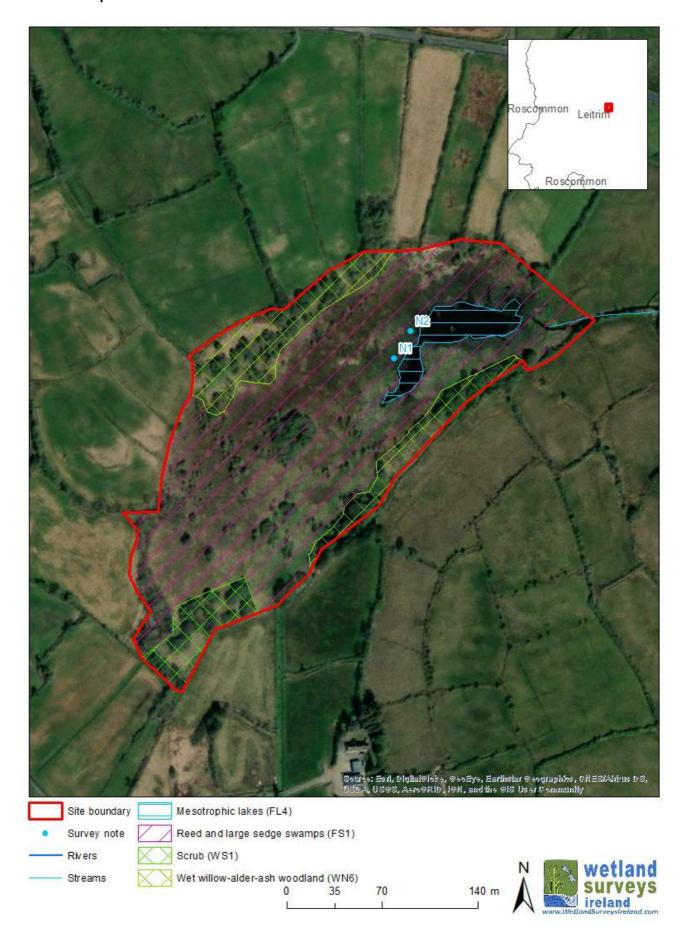
Epilobium hirsutum	Great Willowherb
Equisetum fluviatile	Water Horsetail
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Juncus effusus	Soft-rush
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Myosotis laxa	Tufted forget-me-not
Phalaris arundinacea	Reed Canary-grass
Phragmites australis	Common Reed
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Salix cinerea subsp. cinerea	Grey Willow
Typha latifolia	Bulrush
Fauna on site - English and Latin species name	
Dragon and Damselflies various	
Small White	Pieris rapae











Site Name: ANNAGHMACULLEN LOUGH

Site Code: LE115 Area (ha): 1.32 Grid Ref: 214683 299647 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

E Rating: Local conservation value (low value)

Townland:

ANNAGHMACULLEN

Solid Geology:	Subsoil type: Cut
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Small reed swamp located 6.5km north-east of Mohill.

Site Description and Wetland Habitats Recorded

Small wetland dominated by very dense Phragmites australis reed swamp. Small area of willow scrub occurs in the central area. Survey undertaken from a distance due to deep water and inaccessible swamp. Unable to determine any presence of open water.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
-----	----------	---------

N1 General Site not accessible by foot, viewed from edge of reed swamp.

N2 Ownership Met landowner. Said lake is decreasing in size. In 30's it used to come half way up the field.

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive

None noted

Main Fossitt habitats on site

FS1 Reed and large sedge swamps

FW4 Drainage ditches

WS1 Scrub

Fossitt habitats surrounding site

FW2 Depositing/lowland rivers

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WS1 Scrub

Landuse / Management Activity Frequency of use

None

Impacting Activity (EU code and title)

Intensity Impact

EU Habitats Directive habitats on site

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

Threats

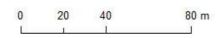
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species name		
Betula pubescens	Downy Birch	
Calliergonella cuspidata	Pointed Spear Moss	
Caltha palustris	Marsh-marigold	
Filipendula ulmaria	Meadowsweet	
Galium palustre	Marsh-bedstraw	

Juncus effusus	Soft-rush	
Myosotis sp.	Forget-me-not	
Phragmites australis	Common Reed	
Potentilla anserina	Silverweed	
Rumex acetosa	Common Sorrel	
Salix cinerea subsp. cinerea	Grey Willow	
Typha latifolia	Bulrush	
Urtica dioica	Common Nettle	
Fauna on site - English and Latin species na	me	
Small White	Pieris rapae	











Site Name: ARDMEENAN LOUGH cNHA

Site Code: LE6 Area (ha): 27.35 Grid Ref: 215000 309800 County: LE



Site designation(s):

cNHA

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature Wetland Survey undertaken using UAV

Wetland Present on the Site

YES

Conservation ranking after survey:

A Rating: Internationally Important

Townland:

LISNATULLAGH

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Peat	Floating mat

River catchment:

Erne

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Lake with extensive wetland approximately 1km south of Ballinamore. Lake surrounded by agriculural lands and conifer forestry plantations.

Site Description and Wetland Habitats Recorded

Large mesotrophic lake with extensive transition mire surrounding the open water. In places Phragmites australis becomes dominant forming reed swamp. Wet willow woodland occurs in the western part of the site. Historic drain discharges to the south. The rare Carex aquatilis was found in the fen vegetation at the lough in 1988 by Ó Críodáin.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment NA NA None

Management Recommendations following survey

Continue current management of this high quality wetland site.

Future Survey Recommendations

Assess potential impacts from drainage and nutrient inputs.

Landowner Information Comments

Central part of site was very inaccessible, therefore surveyed remotely using UAV.

Description of potential EU Habitats Directive Annex 1 habitats

This site contains excellent example of 7140 Transition mires and quaking bogs which is a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

PF3 Transition mire & quaking bog

WN6 Wet willow-alder-ash woodland

WS1 Scrub

Fossitt habitats surrounding site

FW4 Drainage ditches

GA Improved Grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

EU Habitats Directive habitats on site

7140 Transition mires and quaking bogs

Landuse / Management Activity

Grazing - cattle

Impacting Activity (EU code and title)

J02.05 Modification of hydrographic functioning, general

Frequency of use

1 Rare (<5%)

Intensity Impact

C = low - 1 = reparable negative influence

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

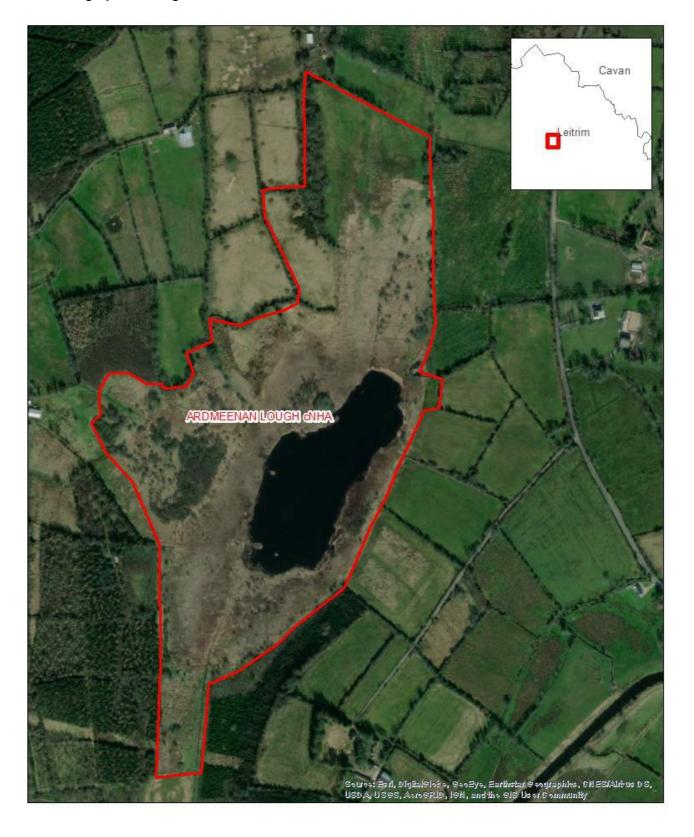
Threats

H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

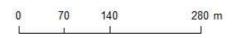
J02.05 Modification of hydrographic functioning, general

Flora on site - Latin & English species name

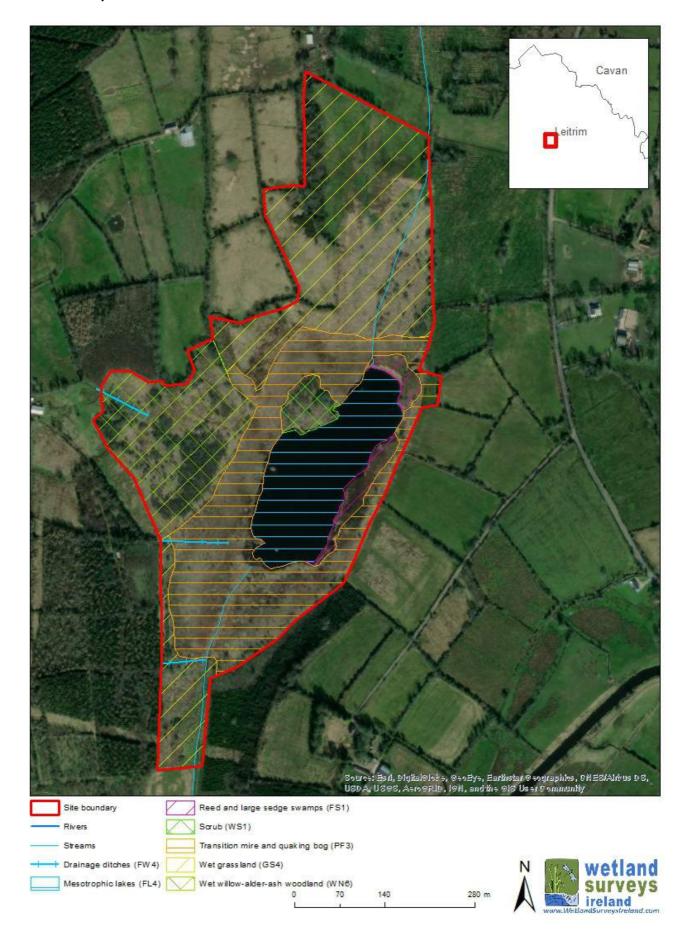
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Calliergonella cuspidata	Pointed Spear Moss
Carex diandra	Lesser Tussock-sedge
Carex rostrata	Bottle Sedge
Cicuta virosa	Cowbane
Comarum palustre	Marsh Cinquefoil
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Hydrocotyle vulgaris	Marsh Pennywort
Iris pseudacorus	Yellow Iris
Lychnis flos-cuculi	Ragged-Robin
Lycopus europaeus	Gypsywort
Lythrum salicaria	Purple-loosestrife
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Myosotis sp.	Forget-me-not
Nuphar lutea	Yellow Water-lily
Pedicularis palustris ???	Marsh Lousewort
Phragmites australis	Common Reed
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Typha latifolia	Bulrush
Fauna on site - English and Latin species name	
Common Frog	Rana temporaria
Mute Swan	Cygnus olor
Small White	Pieris rapae











Site Name: BRAN LOUGH

Site Code: LE157 Area (ha): 16.49 Grid Ref: 196295 302807 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

13/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

DRUMHECKIL

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Mineral Soil	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Bran Lake is located ca 5km north-east of Carrick-on-shannon. The lake is bordered by the R280 road along the western side.

Site Description and Wetland Habitats Recorded

Lake surrounded by narrow band of reed swamp which extends from the lake edge at northern end. Reed swamp is dominated by Schoenoplectus lacustris with Sparganium erectum, Phragmites australis and Typha latifolia. Lake is used for coarse angling with one active fishing platform remaining. A deep drainage channel exits the site to north. Exposed rock outcrop forms lake edge at the northwest.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

Consider interpretative signage.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

GA Improved Grassland

GS4 Wet grassland

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

WL1 Hedgerows

WL2 Treelines

WN6 Wet willow-alder-ash woodland

EU Habitats Directive habitats on site

None noted

Frequency of use

Landuse / Management Activity

Grazing - cattle 2 Occasional (5-20%)

Fishing 1 Rare (<5%)

Impacting Activity (EU code and title) Intensity **Impact**

H01.05 diffuse pollution to surface waters due to agricultural and D = unknown Unknown

forestry activities

J02.05 Modification of hydrographic functioning, general B = medium - 1 = reparable negative influence

Threats

H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

J02.05 Modification of hydrographic functioning, general

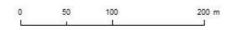
Flora on site - Latin & English species name

Alisma plantago-aquatica	Water-plantain
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica

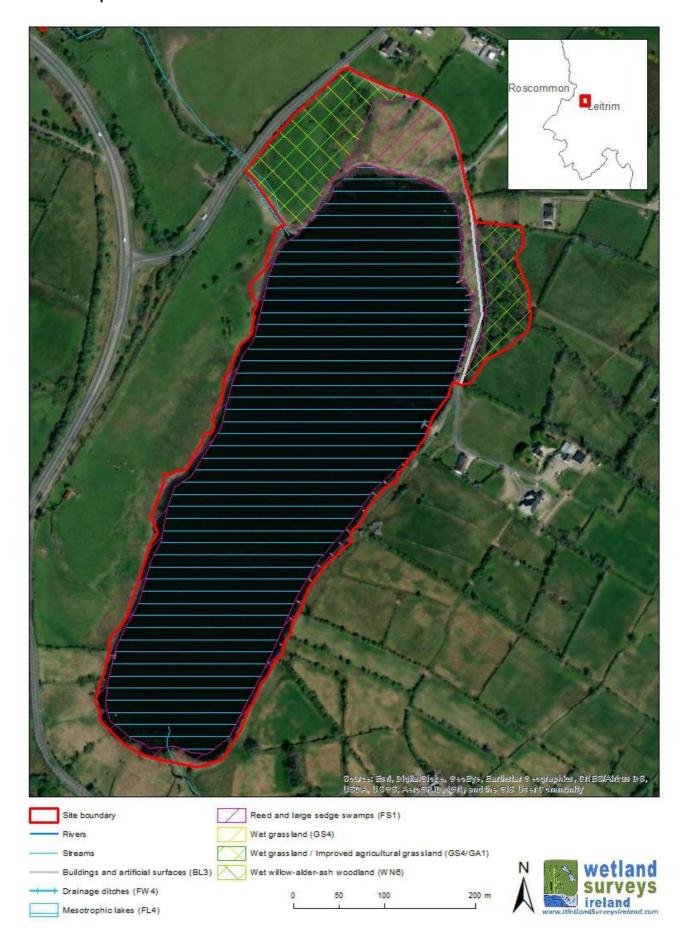
Carex paniculata	Greater Tussock-sedge
Carex rostrata	Bottle Sedge
Cirsium palustre	Marsh Thistle
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Dactylis glomerata	Cock's-foot
Epilobium hirsutum	Great Willowherb
Equisetum arvense	Field Horsetail
Filipendula ulmaria	Meadowsweet
Hedera helix	lvy
Iris pseudacorus	Yellow Iris
Juncus effusus	Soft-rush
Lemna minor	Common Duckweed
Lonicera periclymenum	Honeysuckle
Mentha aquatica	Water Mint
Nuphar lutea	Yellow Water-lily
Persicaria hydropiper	Water-pepper
Phragmites australis	Common Reed
Plantago lanceolata	Ribwort Plantain
Potentilla anserina	Silverweed
Prunus spinosa	Blackthorn
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Senecio jacobaea	Common Ragwort
Sparganium erectum	Branched Bur-reed
Succisa pratensis	Devil's-bit Scabious
Typha latifolia	Bulrush
Vicia cracca	Tufted Vetch
Vicia sepium	Bush Vetch
Fauna on site - English and Latin species name	
Common Bream	Abramis brama
Dragon and Damselflies various	
Great Crested Grebe	Podiceps cristatus
House Martin	Delichon urbicum
Mallard	Anas platyrhynchos
Pike	Esox lucius
Roach	Rutilus rutilus
Small Tortoiseshell	Aglais urticae
Swallow	Hirundo rustica
Wood Pigeon	Columba palumbus











Site Name: BOG LOUGH COMPLEX

Site Code: LE97 Area (ha): 68.03 Grid Ref: 204995 291876 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

FAULTIES

Solid Geology:	Subsoil type:
Navan Group	Water
Substrate type:	Substrate stability:
Peat	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Lake surrounded by largely abandoned cutover approximately 2km north of Dromod.

Site Description and Wetland Habitats Recorded

Lake surrounded by abandoned cutover. The lake has a narrow fringe of emergent reed swamp with wet alder willow woodland. The former cutover is largely dominated by dry birch woodland. Small open areas used in the past for peat cutting are colonised by wet grassland vegetation. Peat has been extracted from excavations within past five years.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment N1 Peat cutting. Damage

Management Recommendations following survey

Assess potential restorion of cutover areas at the site.

Future Survey Recommendations

Marsh fritillary survey may be worth considering in more open cutover habitat amongst areas with abundant foodplant (Succisa pratensis) at suitable time of the year.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

B4 - :				4 - 4 -		- 14 -
Main	FOSS	III	nab	เรลเร	on	SITE

BL3 Buildings and artificial surfaces

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

GS4 Wet grassland

PB4 Cutover bog

WL1 Hedgerows

WL2 Treelines

WN6 Wet willow-alder-ash woodland

WN7 Bog woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

EU Habitats Directive habitats on site

91E0 *Alluvial forests with Alnus glutinosa and

Landuse / Management Activity

1 Rare (<5%) Grazing - cattle

Impacting Activity (EU code and title)

J02.05 Modification of hydrographic functioning, general

Intensity **Impact**

Frequency of use

B = medium - 2 = irreparable negative

Threats

J02.05 Modification of hydrographic functioning, general

Flora on site - Latin & English species name

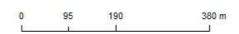
Alnus glutinosa Alder

Arrhenatherum elatius False Oat-grass

Betula pubescens	Downy Birch	
Calluna vulgaris	Ling Heather	
Calystegia sepium	Hedge Bindweed	
Carex rostrata	Bottle Sedge	
Comarum palustre	Marsh Cinquefoil	
Epilobium hirsutum	Great Willowherb	
Filipendula ulmaria	Meadowsweet	
Iris pseudacorus	Yellow Iris	
Juncus effusus	Soft-rush	
Juncus effusus	Soft-rush	
Lythrum salicaria	Purple-loosestrife	
Molinia caerulea	Purple Moor-grass	
Nymphaea alba	White Water-lily	
Oenanthe crocata	Hemlock Water-dropwort	
Potentilla erecta	Tormentil	
Pteridium aquilinum	Bracken	
Quercus robur	Pedunculate Oak	
Rhytidiadelphus squarrosus	Moss	
Salix cinerea subsp. cinerea	Grey Willow	
Salix cinerea subsp. cinerea	Grey Willow	
Schoenoplectus lacustris	Common Club-rush	
Succisa pratensis	Devil's-bit Scabious	
Ulex europaeus	Gorse	
Fauna on site - English and Latin species name		
Common Frog	Rana temporaria	
Mute Swan	Cygnus olor	
Small Tortoiseshell	Aglais urticae	
Wood Pigeon	Columba palumbus	
		_











Site Name: CARRICKEVY LOUGH

Site Code: LE158 Area (ha): 10.03 Grid Ref: 196059 303598 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

13/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

TULLYLANNAN

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Mineral Soil	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Small lake locared ca 5km northeast of Carrick-on-Shannon on eastern side of main road R280.

Site Description and Wetland Habitats Recorded

Mesotrophic lake with narrow band of fringing reed swamp. Extends into wet grassland at western side, to the north is agricultural grassland on moderate slope. Small extent of rocky shore at eastern end. No fishing or amenity use. River outlet at eastern end of lake.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

GS4 Wet grassland

WL Linear woodland/scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Frequency of use

Grazing - cattle

2 Occasional (5-20%)

Impacting Activity (EU code and title)

Intensity

Impact

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

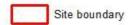
Threats

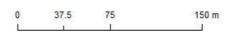
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species na	me
Arrhenatherum elatius	False Oat-grass
Calliergonella cuspidata	Pointed Spear Moss
Cerastium fontanum	Common Mouse-ear
Crataegus monogyna	Hawthorn
Crataegus monogyna	Hawthorn
Cynosurus cristatus	Crested Dog's-tail
Filipendula ulmaria	Meadowsweet
Fraxinus excelsior	Ash
Galium palustre	Marsh-bedstraw

Leitrim Wetland Field Survey 2021		CARRICKEVY LOUGH
Holcus lanatus	Yorkshire-fog	
Holcus lanatus	Yorkshire-fog	
Iris pseudacorus	Yellow Iris	
Juncus articulatus	Jointed Rush	
Juncus effusus	Soft-rush	
Juncus inflexus	Hard Rush	
Lathyrus pratensis	Meadow Vetchling	
Lychnis flos-cuculi	Ragged-Robin	
Mentha aquatica	Water Mint	
Phleum pratense	Timothy	
Phragmites australis	Common Reed	
Potentilla anserina	Silverweed	
Ranunculus acris	Meadow Buttercup	
Ranunculus repens	Creeping Buttercup	
Rumex acetosa	Common Sorrel	
Salix cinerea subsp. cinerea	Grey Willow	
Schedonorus arundinaceus	Tall Fescue	
Schoenoplectus lacustris	Common Club-rush	
Taraxacum agg.	Dandelion	
Trifolium pratense	Red Clover	
Trifolium repens	White Clover	
Typha latifolia	Bulrush	
Fauna on site - English and Latin species name		
Dragon and Damselflies various		
Mute Swan	Cygnus olor	
Small Tortoiseshell	Aglais urticae	











Site Name: CARRIGALLEN LOUGH

Site Code: LE198 Area (ha): 8.08 Grid Ref: 222989 303308 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

KILLAHURK

Solid Geology: Derryveeny Formation	Subsoil type: Water
Substrate type:	Substrate stability:
Alluvial deposit	Firm

River catchment:

Erne

CORINE Habitats:

Pastures

Lake located at Carrigallen village. Site used for coarse fishing with facilities provided.

Site Description and Wetland Habitats Recorded

Large open water lake with narrow band of reed swamp vegetation, elevated farmland and residential developments surround the site. A small area of alder and willow woodland occurs along the northern lake edge.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

N1 Management Could be an option for housing estate to manage grassland area for biodiversity.

N2 Invasive Buddleia.

Management Recommendations following survey

Potential enhancement measures could be promoted by local community or residential groups.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fo	ssitt	habit	tats on	site
---------	-------	-------	---------	------

BL3 Buildings and artificial surfaces

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity	Frequency of use
Fishing	3 Frequent (21-50%)

Impacting Activity (EU code and title)

F02.03 Leisure fishing

Intensity Impact

B = medium - 1 = reparable negative influence

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

Threats

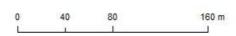
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species name Algae	
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Buddleja davidii	Butterfly-bush

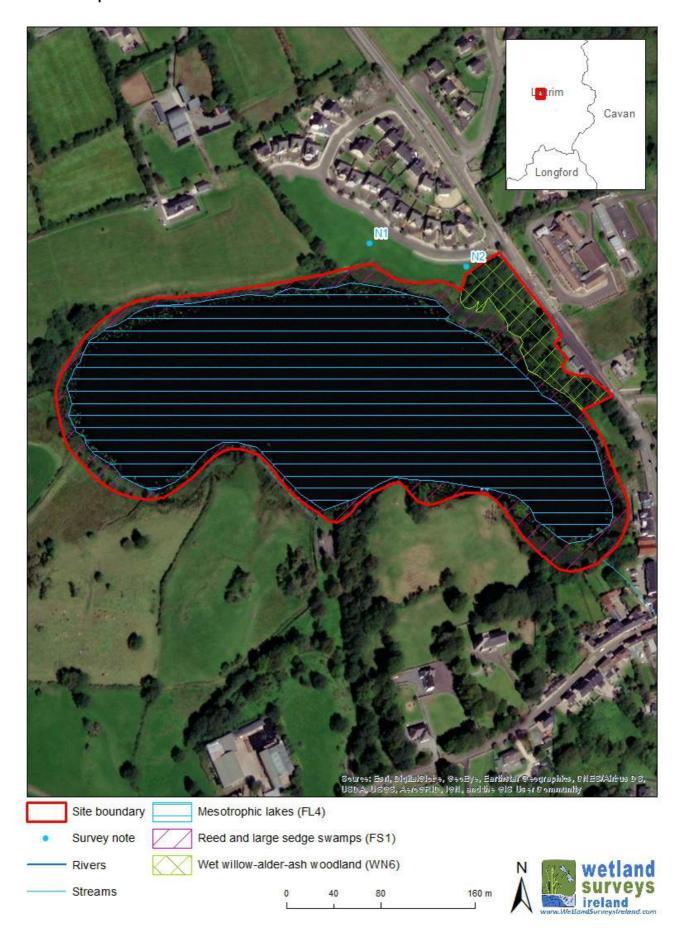
Hedge Bindweed Bottle Sedge Great Willowherb
Great Willowherb
Water Horsetail
Meadowsweet
Marsh-bedstraw
Marsh Pennywort
Yellow Pimpernel
Forget-me-not
Yellow Water-lily
White Water-lily
Reed Canary-grass
Blackberry
Grey Willow
Marsh Ragwort
Bulrush
Phalacrocorax carbo
Cygnus olor











Site Name: CLOONBONIAGH LOUGH

Site Code: LE94 Area (ha): 37.70 Grid Ref: 206247 292857 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

CORRASCOFFY

Solid Geology:	Subsoil type:
Navan Group	Water
Substrate type:	Substrate stability:
Mineral Soil	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Transitional woodland scrub

Mesotrophic lake located 5.91km north east of Roosky.

Site Description and Wetland Habitats Recorded

Mesotrophic lake surrounded by narrow fringe of reed swamp. Small area of wet woodland on island near southern shore. Wet grassland occurs in low lying areas surrounding lake. Elsewhere surrounding the lake is proved agricultural grassland occurs. Coarse fishing is promoted at the lake.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment NA NA None

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site	EU Habitats Directive habitats on site
FL4 Mesotrophic lakes	None noted

FS1 Reed and large sedge swamps

GS4 Wet grassland

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

WL1 Hedgerows

Landuse / Management Activity	Frequency of use
Amenity Management	1 Rare (<5%)
Fishing	2 Occasional (5-20%)

Impacting Activity (EU code and title)IntensityImpactH01 Pollution to surface waters (limnic & terrestrial)D = unknownUnknown

F02.03 Leisure fishing B = medium - 1 = reparable negative influence

Threats

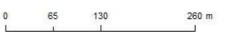
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species nan	me
Alisma plantago-aquatica	Water-plantain
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Carex sp.	Sedge
Eleocharis palustris	Common Spike-rush
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet

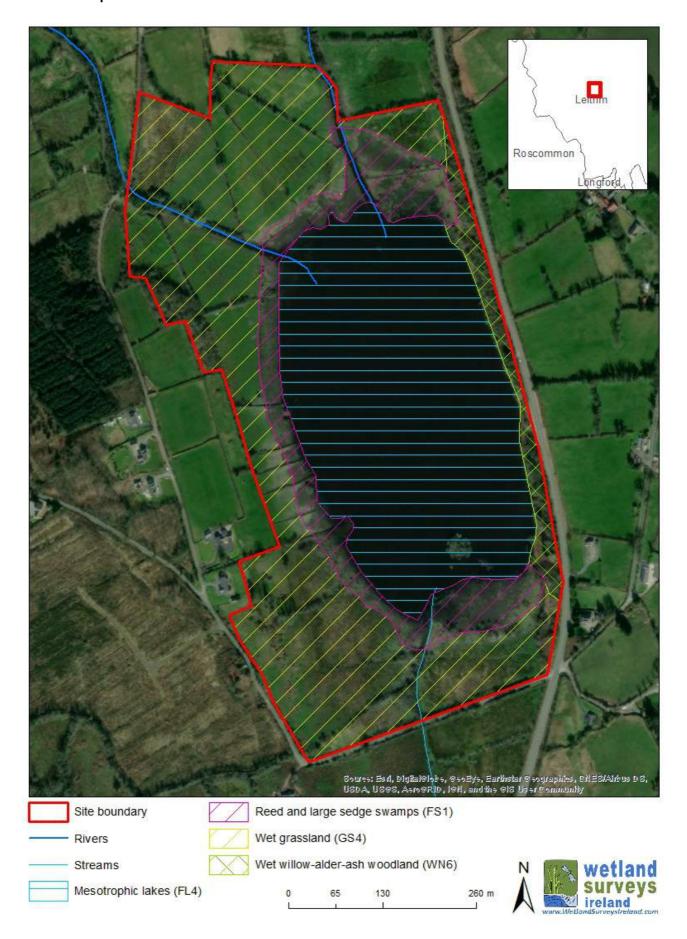
-	
Galium palustre	Marsh-bedstraw
Hedera helix	lvy
Hydrocotyle vulgaris	Marsh Pennywort
Juncus articulatus	Jointed Rush
Juncus effusus	Soft-rush
Lythrum salicaria	Purple-loosestrife
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Nuphar lutea	Yellow Water-lily
Oenanthe aquatica	Fine-leaved Water-dropwort
Persicaria hydropiper	Water-pepper
Phalaris arundinacea	Reed Canary-grass
Plantago lanceolata	Ribwort Plantain
Potentilla anserina	Silverweed
Potentilla anserina	Silverweed
Ranunculus flammula	Lesser Spearwort
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Sparganium erectum	Branched Bur-reed
Viola palustris	Marsh Violet
Fauna on site - English and Latin species name	
Mallard	Anas platyrhynchos
Mute Swan	Cygnus olor
Pike	Esox lucius
Speckled Wood	Pararge aegeria
Swallow	Hirundo rustica











Site Name: CLOONCAHIR BOG



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

CLOONCAHIR

Solid Geology:	Subsoil type:
Courceyan limestone	Cut
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Peat bogs

Raised bog site located 2.2km due south of Mohill.

Site Description and Wetland Habitats Recorded

Main intact raised bog area occurs in east of the site and is dominated by degraded raised bog. Eastern bog includes area of active peat cutting in the north. A track running north-south divides the site in the west with further smaller cutover bog area. Recent peat cutting undertaken on the site in the last 5 years.

Target Notes - (see Habitat Map for location of Target Notes)

No. Comment Category None NA NA

Management Recommendations following survey

Assess potential for hydological restoration potential.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Site contains 7120 Degraded raised bogs still capable of natural regeneration, with sub-marginal community complexes dominating.

Main Fossitt habitats on site

BL3 Buildings and artificial surfaces

PB1 Raised bogs

PB4 Cutover bog

WN7 Bog woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WD2 Mixed broadleaved/conifer woodland

WL1 Hedgerows

WS1 Scrub

EU Habitats Directive habitats on site

7120 Degraded raised bogs still capable of natural

Landuse / Management Activity

Hunting/Shooting

Peat cutting (mechanical)

Impacting Activity (EU code and title)

J02.05 Modification of hydrographic functioning, general

C01.03.02 mechanical removal of peat

F03.01 Hunting

Frequency of use

1 Rare (<5%)

2 Occasional (5-20%)

Intensity **Impact**

- 2 = irreparable negative B = medium

C = lowUnknown

Threats

C01.03.02 mechanical removal of peat

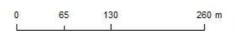
F03.01 Hunting

J02.05 Modification of hydrographic functioning, general

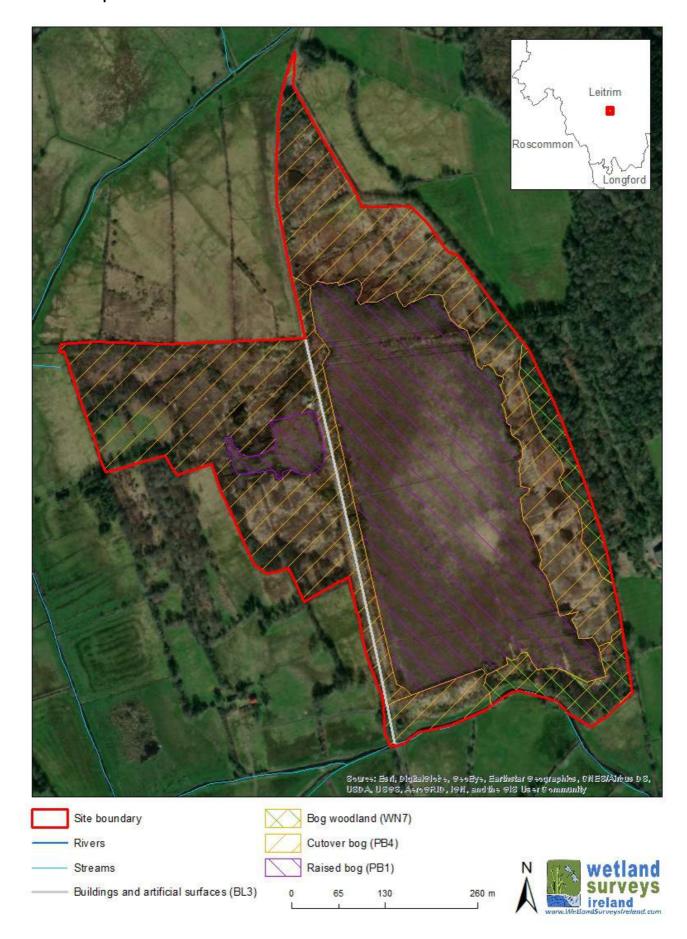
Flora on site - Latin & English species name	
Alnus glutinosa	Alder
Andromeda polifolia	Bog-rosemary
Betula pubescens	Downy Birch
Calluna vulgaris	Ling Heather
Chamerion angustifolium	Rosebay Willowherb
Cladonia floerkeana	Matchstick Lichen, Devil's matchsticks
Cladonia portentosa	Branching Lichen
Cladonia pyxidata	Cup Lichen
Cladonia uncialis	Antler Lichen
Drosera rotundifolia	Round-leaved Sundew
Erica tetralix	Cross-leaved Heath
Eriophorum angustifolium	Common Cottongrass
Eriophorum vaginatum	Hare's-tail Cottongrass
Leucobryum glaucum	Cushion Moss
Molinia caerulea	Purple Moor-grass
Myrica gale	Bog-myrtle
Narthecium ossifragum	Bog Asphodel
Polygala serpyllifolia	Heath Milkwort
Pteridium aquilinum	Bracken
Quercus robur	Pedunculate Oak
Rhynchospora alba	White Beak-sedge
Rubus fruticosus agg.	Blackberry
Sphagnum austinii	Austin's Bog Moss
Sphagnum capillifolium	Acute-leaved Bog Moss
Sphagnum cuspidatum	Feathery Bog Moss
Sphagnum fallax	Flat-topped Bog Moss
Sphagnum fuscum	Rusty Bog Moss
Sphagnum papillosum	Papillose Bog Moss
Sphagnum tenellum	Soft Bog Moss
Succisa pratensis	Devil's-bit Scabious
Trichophorum cespitosum	Deergrass
Fauna on site - English and Latin species name	
Mallard	Anas platyrhynchos
Speckled Wood	Pararge aegeria











Site Name: CLOONE LOUGH

Site Code: LE274 Area (ha): 13.37 Grid Ref: 216006 303311 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

LISGILLOCK GLEBE

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Lake and associated wet grassland area located approximately, 8.3km south of Ballinamore.

Site Description and Wetland Habitats Recorded

This mesotropic lake is surrounded by a narrow fringe of reed swamp with willow dominated scrub and woodland occurring amongst the swamp to the north of the lake. A good example of species rich wet grassland occurs to the south of the lake.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

N1 Invasive Snowberry on roadside.

Management Recommendations following survey

Continue current management of high quality wet grassland.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Wet willow woodland may correspond with EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

WL2 Treelines

WN6 Wet willow-alder-ash woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

EU Habitats Directive habitats on site

91E0 *Alluvial forests with Alnus glutinosa and

Landuse / Management Activity

Frequency of use 2 Occasional (5-20%)

Grazing - cattle 2 Occasional (5-20%)

Impacting Activity (EU code and title)

Intensity

Impact

H01.05 diffuse pollution to surface waters due to agricultural and C = low Unknown

forestry activities

J02.05 Modification of hydrographic functioning, general C = low - 1 = reparable negative influence

Threats

B02 Forest and Plantation management & use

H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

J02.05 Modification of hydrographic functioning, general

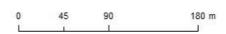
Flora on site - Latin & English species name

Agrostis stolonifera	Creeping Bent
Alisma plantago-aquatica	Water-plantain
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Anthoxanthum odoratum	Sweet Vernal-grass
Briza media	Quaking-grass
Caltha palustris	Marsh-marigold
Cardamine pratensis	Cuckooflower
Carex demissa	Common Yellow-sedge
Carex echinata	Star Sedge
Carex flacca	Glaucous Sedge
Carex panicea	Carnation Sedge
Carex rostrata	Bottle Sedge
Cicuta virosa	Cowbane
Cirsium palustre	Marsh Thistle
Comarum palustre	Marsh Cinquefoil
Crataegus monogyna	Hawthorn
Dactylorhiza fuchsii	Common Spotted-orchid
Eleocharis palustris	Common Spike-rush
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Holcus lanatus	Yorkshire-fog
Hydrocotyle vulgaris	Marsh Pennywort
Juncus articulatus	Jointed Rush
Juncus effusus	Soft-rush
Lychnis flos-cuculi	Ragged-Robin
Lycopus europaeus	Gypsywort
Lythrum salicaria	Purple-loosestrife
Mentha aquatica	Water Mint
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Molinia caerulea	Purple Moor-grass
Molinia caerulea	Purple Moor-grass
Nuphar lutea	Yellow Water-lily
Phragmites australis	Common Reed
Potentilla anserina	Silverweed
Prunella vulgaris	Selfheal
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Salix aurita	Eared Willow
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Senecio aquaticus	Marsh Ragwort
Succisa pratensis	Devil's-bit Scabious

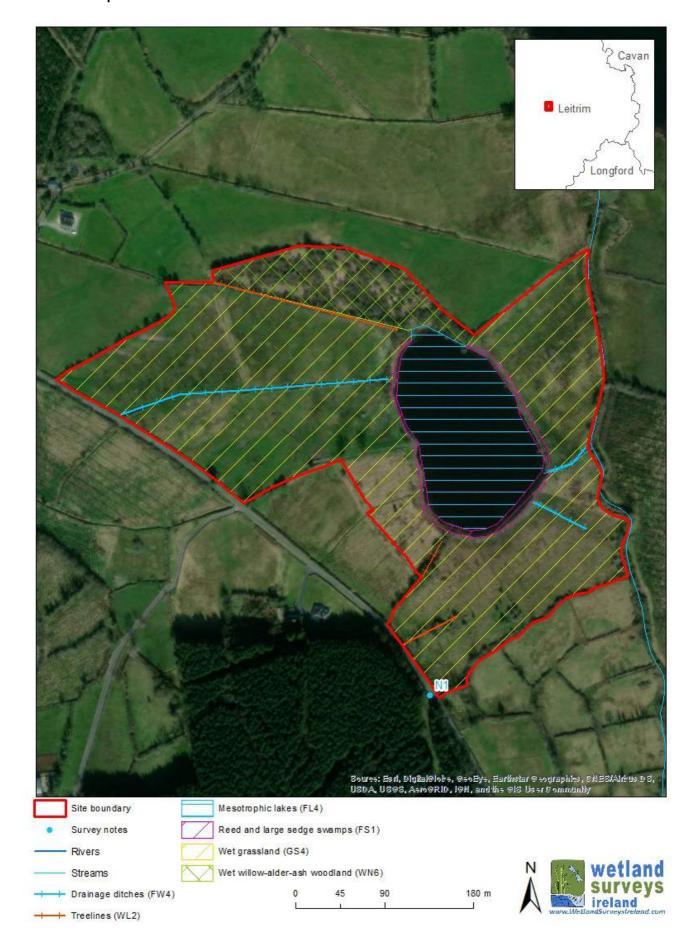
Fauna on site - English and Latin species name		
Common Frog	Rana temporaria	
Dragon and Damselflies various		
Small tortoiseshell	Aglais urticae	
Small White	Pieris rapae	











Site Name: CLOONTURK CLOONCORLY

Site Code: LE99 Area (ha): 23.17 Grid Ref: 205623 290722 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

C Rating: Local conservation value (high value)

Townland:

CLOONTURK

Solid Geology:	Subsoil type:
Navan Group	Cut
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Remnant raised bog and cutover occurring alongside N4 3.67km north of Roosky.

Site Description and Wetland Habitats Recorded

Small area of remnant high bog with typical raised bog communities. This is surrounded by more extensive abandoned cutover that is dry and intensively drained. Regeneration of dry gorse, birch, and bracken with tall heather in places. Mature dry Birch woodland extends throughout much of the cutover. Wet grassland and Phalaris arundinacea reed swamp occur alongside river in northern part of site.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
-----	----------	---------

N1 Damage Dumping of brash and earth material on made ground within area of dry birch woodland on cutover.

Management Recommendations following survey

Assess restoration potential of drained cutover areas at the site.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Parts of the site may also correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.

Main Fossitt habitats on site

BL3 Buildings and artificial surfaces

FS1 Reed and large sedge swamps

FW2 Depositing/lowland rivers

GS4 Wet grassland

PB1 Raised bogs

PB4 Cutover bog

WN7 Bog woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW2 Depositing/lowland rivers

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

EU Habitats Directive habitats on site

7120 Degraded raised bogs still capable of natural

Impact

Landuse / Management Activity

Grazing - horses 1 Rare (<5%) Legal dumping 1 Rare (<5%)

Impacting Activity (EU code and title)

J02.05 Modification of hydrographic functioning, general A = high - 2 = irreparable negative

C01.03 Peat extraction D = unknown - 2 = irreparable negative

Frequency of use

Intensity

J02.01.03 infilling of ditches, dykes, ponds, pools, marshes or pits C = low - 2 = irreparable negative

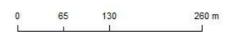
Threats

J02.05 Modification of hydrographic functioning, general

Flora on site - Latin & English species name	
Andromeda polifolia	Bog-rosemary
Aulacomnium palustre	Moss
Betula pubescens	Downy Birch
Calluna vulgaris	Ling Heather
Calystegia sepium	Hedge Bindweed
Carex panicea	Carnation Sedge
Centaurea nigra	Common Knapweed
Chamerion angustifolium	Rosebay Willowherb
Cladonia portentosa	Branching Lichen
Crataegus monogyna	Hawthorn
Deschampsia cespitosa	Tufted Hair-grass
Erica tetralix	Cross-leaved Heath
Eriophorum angustifolium	Common Cottongrass
Eriophorum vaginatum	Hare's-tail Cottongrass
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Hypericum tetrapterum	Square-stalked St John's-wort
Hypnum jutlandicum	Moss
Hypochaeris radicata	Cat's-ear
Juncus effusus	Soft-rush
Lythrum salicaria	Purple-loosestrife
Molinia caerulea	Purple Moor-grass
Narthecium ossifragum	Bog Asphodel
Phalaris arundinacea	Reed Canary-grass
Phleum pratense	Timothy
Phragmites australis	Common Reed
Polytrichum commune	Common Haircap Moss
Potentilla anserina	Silverweed
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow
Sphagnum capillifolium	Acute-leaved Bog Moss
Sphagnum cuspidatum	Feathery Bog Moss
Sphagnum magellanicum	Magellan's Bog Moss
Sphagnum papillosum	Papillose Bog Moss
Stachys palustris	Marsh Woundwort
Succisa pratensis	Devil's-bit Scabious
Ulex europaeus	Gorse
Vaccinium myrtillus	Bilberry
Vaccinium oxycoccos	Cranberry
Vicia cracca	Tufted Vetch
Fauna on site - English and Latin species name	
Dragon and Damselflies various	
Robin	Erithacus rubecula
Small White	Pieris rapae











Site Name: CORRACAR

Site Code: LE189 Area (ha): 5.54 Grid Ref: 223068 308730 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Additional Survey may be required Preliminary Wetland field inspection undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

D Rating: Local conservation value (moderate value)

Townland:

CORRACAR

Solid Geology:	Subsoil type:
Courceyan limestone	Cut
Substrate type:	Substrate stability:

River catchment:

Erne

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Wet woodland located 2.4km south-east of Newtowngore. Site was surveyed visually from a distance due to access difficulties.

Site Description and Wetland Habitats Recorded

Birch dominated woodland occurring on peat with abundance of willow. Surrounded by improved grassland and conifer plantation.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

None

Future Survey Recommendations

Site was surveyed visually from a distance due to access difficulties.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FW4 Drainage ditches

WN7 Bog woodland

EU Habitats Directive habitats on site

None noted

Fossitt habitats surrounding site

FW4 Drainage ditches

GA1 Improved agricultural grassland

WD4 Conifer plantation

Landuse / Management Activity	Frequency of use
Forestry	2 Occasional (5-20%)

Impacting Activity (EU code and title) Intensity Impact

J02.05 Modification of hydrographic functioning, general B = medium - 2 = irreparable negative

B02 Forest and Plantation management & use B = medium Unknown

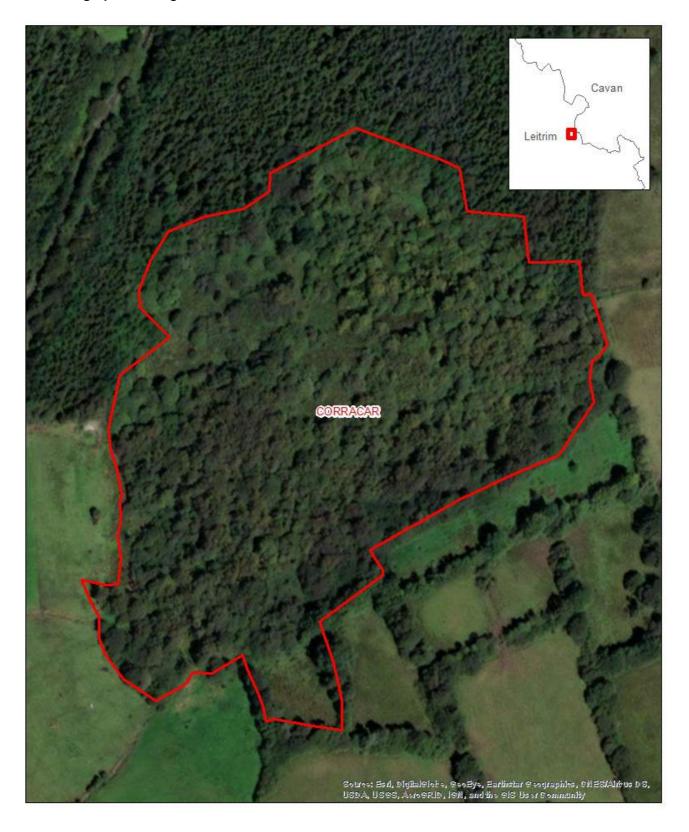
J02.01.03 infilling of ditches, dykes, ponds, pools, marshes or pits C = low - 2 = irreparable negative

Threats

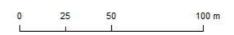
B02 Forest and Plantation management & use

Flora on site - Latin & English species name	
Acer pseudoplatanus	Sycamore
Angelica sylvestris	Wild Angelica
Betula pubescens	Downy Birch
Epilobium hirsutum	Great Willowherb
Geranium robertianum	Herb-Robert
Hedera helix	lvy
Juncus effusus	Soft-rush
Molinia caerulea	Purple Moor-grass
Persicaria hydropiper	Water-pepper
Plantago lanceolata	Ribwort Plantain

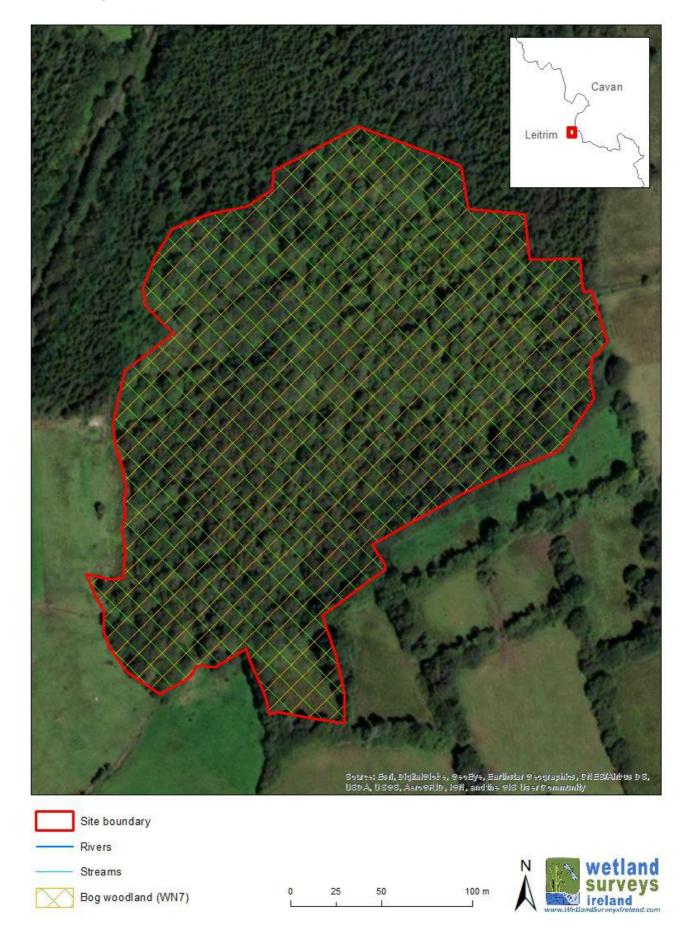
Rubus fruticosus agg.	Blackberry
Rumex obtusifolius	Broad-leaved Dock
Salix cinerea subsp. cinerea	Grey Willow
Fauna on site - English and Latin species name	
Blackbird	Turdus merula
Small Tortoiseshell	Aglais urticae
Wood Pigeon	Columba palumbus











Site Name: CORRAWALEEN MULLAGHBOY BOG AND WOODLAND

Site Code: LE253 Area (ha): 63.61 Grid Ref: 219052 307935 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Additional Survey may be required Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

MULLAGHBOY (Carrigallen

Solid Geology:	Subsoil type:
Marine shelf facies	Cut
Substrate type:	Substrate stability:
Peat	Firm

River catchment:

Erne

CORINE Habitats:

Peat bogs

Linear degraded raised bog located within a valley approximately 6.6km south of Ballinamore.

Site Description and Wetland Habitats Recorded

This remnant raised bog has been subject to historic peat cutting. The site is no longer used for peat extraction. The drainage is continuing to have an effect on the site. Typical bog vegetation continues to dominate the site with Calluna vulgaris, Erica tetralix, Molinia caerulea, Eriophorum spp, and Sphagnum all abundant. A road crosses the site in the northern section and a gravel yard occurring on built lands occurs in the south.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
N1	Damage	Gravel yard.

N2 Invasive Large stand of Japanese Knotweed. Some has been treated right on roadside edge.

Management Recommendations following survey

Recommend that drain blocking should be undertaken throughout the site to encourage peat forming conditions to become established.

Future Survey Recommendations

Assess restoration potential of the site through an eco-hydological survey of the site.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Parts of the site may also correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.

Main Fossitt habitats on site

BL3 Buildings and artificial surfaces

ED1 Exposed sand, gravel or till

FW4 Drainage ditches

GS4 Wet grassland

PB1 Raised bogs

PB4 Cutover bog

WN7 Bog woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

7120 Degraded raised bogs still capable of natural

Impact

Landuse / Management Activity

Grazing - cattle 2 Occasional (5-20%)

Roads 1 Rare (<5%)

Impacting Activity (EU code and title)

J02.01.03 infilling of ditches, dykes, ponds, pools, marshes or pits C = low - 2 = irreparable negative

J02.05 Modification of hydrographic functioning, general A = high - 1 = reparable negative influence

Frequency of use

Intensity

101 invasive non-native species B = medium - 1 = reparable negative influence

Threats

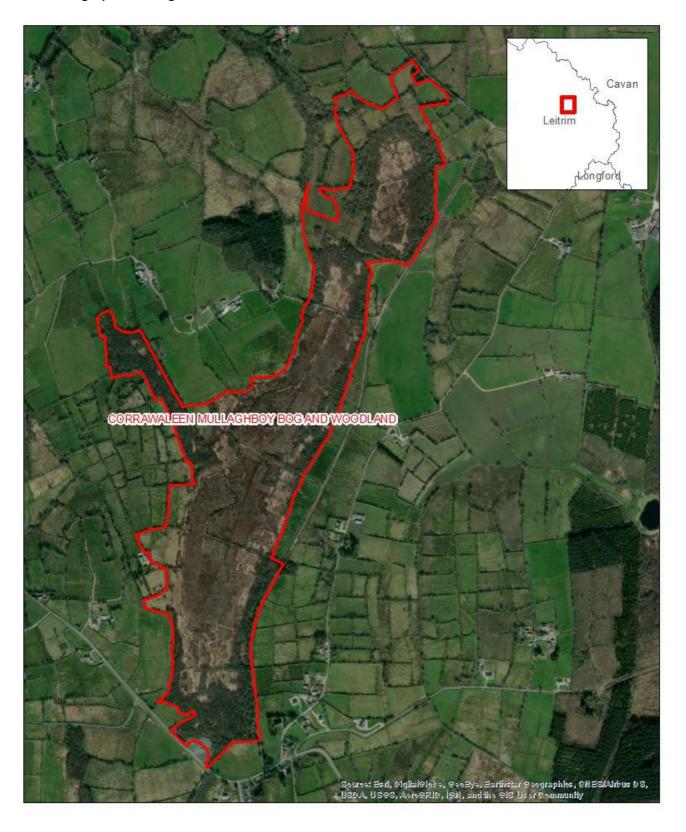
101 invasive non-native species

Dragon and Damselflies various

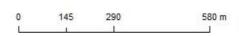
J02.01.03 infilling of ditches, dykes, ponds, pools, marshes or pits

J02.05 Modification of hydrographic functioning, general

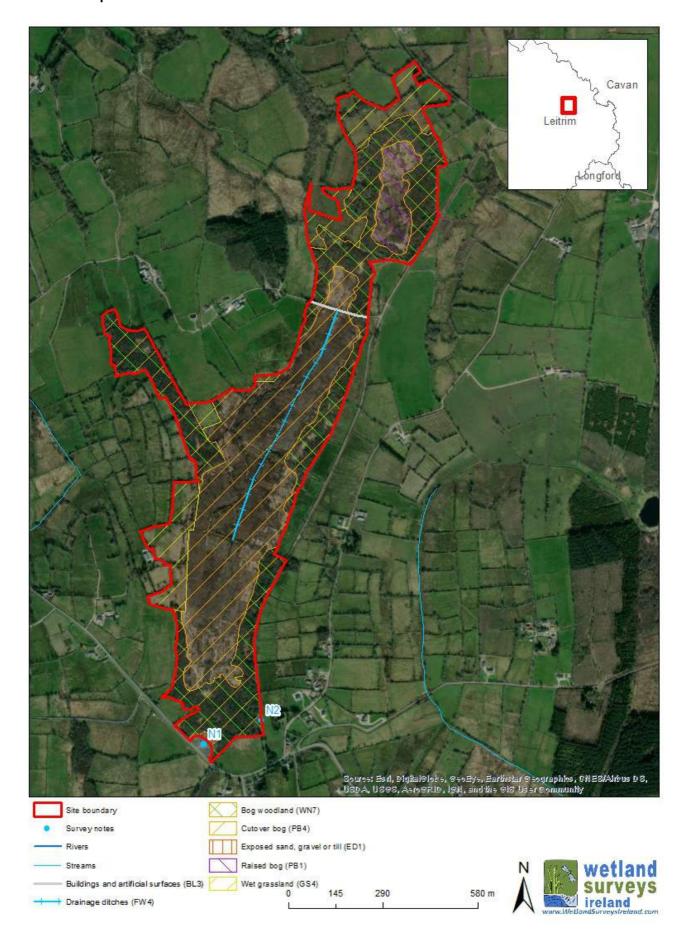
Andromeda polifolia	Bog-rosemary	
Betula pubescens	Downy Birch	
Calluna vulgaris	Ling Heather	
Carex panicea	Carnation Sedge	
Cladonia portentosa	Branching Lichen	
Drosera rotundifolia	Round-leaved Sundew	
Erica tetralix	Cross-leaved Heath	
Eriophorum angustifolium	Common Cottongrass	
Eriophorum vaginatum	Hare's-tail Cottongrass	
Fallopia japonica	Japanese Knotweed	
Juncus effusus	Soft-rush	
Molinia caerulea	Purple Moor-grass	
Myrica gale	Bog-myrtle	
Narthecium ossifragum	Bog Asphodel	
Potentilla erecta	Tormentil	
Rhynchospora alba	White Beak-sedge	
Rubus fruticosus agg.	Blackberry	
Sphagnum capillifolium	Acute-leaved Bog Moss	
Sphagnum cuspidatum	Feathery Bog Moss	
Sphagnum magellanicum	Magellan's Bog Moss	
Sphagnum palustre	Blunt-leaved Bog Moss	
Sphagnum papillosum	Papillose Bog Moss	
Sphagnum subnitens	Lustrous Bog Moss	
Sphagnum tenellum	Soft Bog Moss	
Trichophorum cespitosum	Deergrass	
Vaccinium oxycoccos	Cranberry	











Site Name: DERREEN BUNNY MORE UPPER CUTOVER

Site Code: LE73 Area (ha): 15.71 Grid Ref: 203003 298862 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

D Rating: Local conservation value (moderate value)

Townland:

DERREEN (ED Annaduff)

Solid Geology:	Subsoil type:
Marine shelf facies	Cut
Substrate type:	Substrate stability:
Peat	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Cutover bog located 3.8km north-east of Drumsna.

Site Description and Wetland Habitats Recorded

Small cutover bog surrounded by forestry and agricultural grassland. No high bog remaining. Much of the site colonised by dry species poor birch woodland and gorse scrub. Mix of acid wet grassland (Molinia, Succisa, Potentilla) and bog communities occur in open areas of more recent cutover.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
N1	General	Trackway with suitable MF habitat.
N2	Damage	Recently cut turf sods drying here.
N3	Damage	Facebank.

Management Recommendations following survey

Halt turf cutting and assess restoration potential.

Future Survey Recommendations

Undertake Marsh fritillary survey amongst areas with abundant foodplant (Succisa pratensis) at suitable time of the year. Assess restoration potential of cutover bog.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

GA1 Improved agricultural grassland

GS4 Wet grassland

PB4 Cutover bog

WN7 Bog woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Peat cutting (mechanical)

Impacting Activity (EU code and title)

C01.03.02 mechanical removal of peat

Frequency of use

2 Occasional (5-20%)

Intensity

Impact

C = low - 2 = irreparable negative

Threats

C01.03.02 mechanical removal of peat

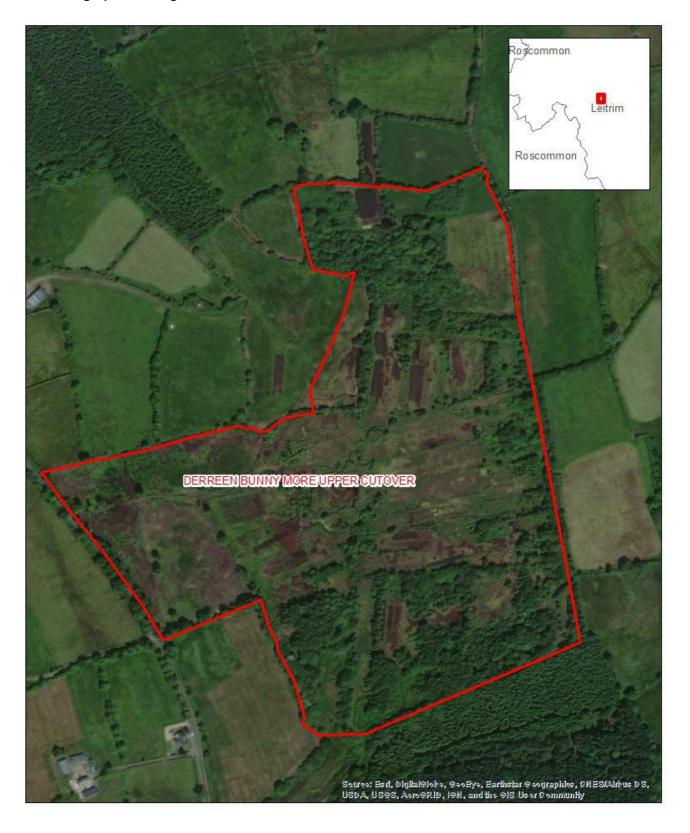
Flora on site - Latin & English species name

Angelica sylvestris Wild Angelica

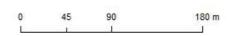
,	
Betula pubescens	Downy Birch
Calluna vulgaris	Ling Heather
Carex demissa	Common Yellow-sedge
Carex panicea	Carnation Sedge
Chamerion angustifolium	Rosebay Willowherb
Erica tetralix	Cross-leaved Heath
Eriophorum angustifolium	Common Cottongrass
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Hydrocotyle vulgaris	Marsh Pennywort
Hypochaeris radicata	Cat's-ear
Juncus acutiflorus	Sharp-flowered Rush
Juncus effusus	Soft-rush
Lemna minor	Common Duckweed
Lotus pedunculatus	Greater Bird's-foot-trefoil
Molinia caerulea	Purple Moor-grass
Myrica gale	Bog-myrtle
Plantago lanceolata	Ribwort Plantain
Polygala serpyllifolia	Heath Milkwort
Potentilla erecta	Tormentil
Prunella vulgaris	Selfheal
Pteridium aquilinum	Bracken
Ranunculus acris	Meadow Buttercup
Ranunculus repens	Creeping Buttercup
Rubus fruticosus agg.	Blackberry
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow
Sphagnum cuspidatum	Feathery Bog Moss
Sphagnum palustre	Blunt-leaved Bog Moss
Sphagnum subnitens	Lustrous Bog Moss
Sphagnum tenellum	Soft Bog Moss
Succisa pratensis	Devil's-bit Scabious
Taraxacum agg.	Dandelion
Tussilago farfara	Colt's-foot
Typha latifolia	Bulrush
Ulex europaeus	Gorse
Urtica dioica	Common Nettle
Vicia cracca	Tufted Vetch
Fauna on site - English and Latin species name	
Blackbird	Turdus merula
Common Frog	Rana temporaria
Dragon and Damselflies various	
Marsh Fritillary	Euphydryas aurinia
Small Tortoiseshell	Aglais urticae
Speckled Wood	Pararge aegeria

Wren

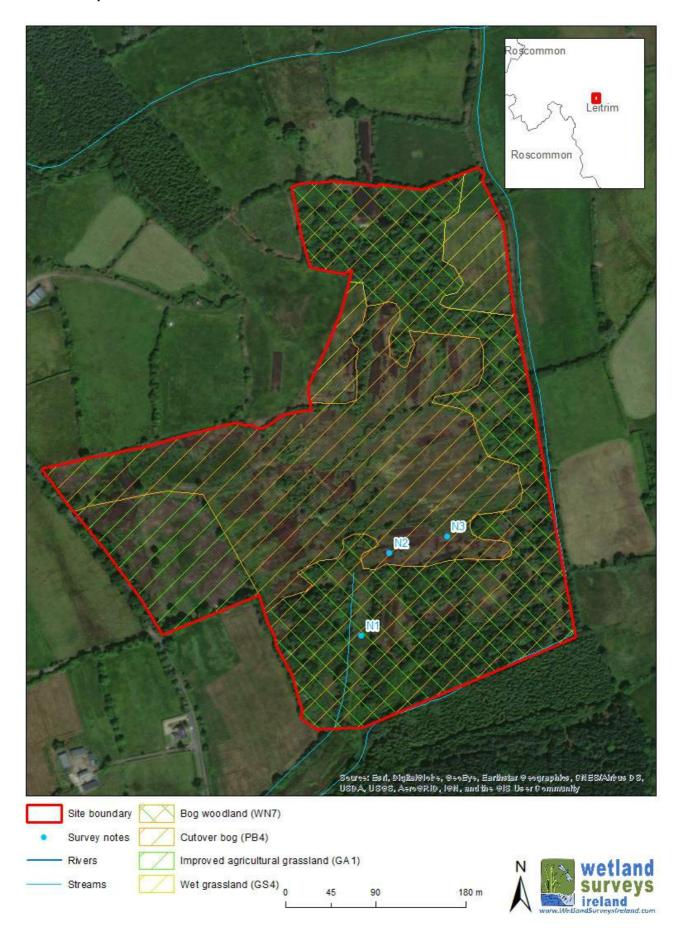
Troglodytes troglodytes











Site Name: DRUMARD LOUGH

Site Code: LE91 Area (ha): 6.81 Grid Ref: 208943 292924 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Additional Survey may be required Site previously mapped in GIS dataset Site previously reported from literature Wetland Survey undertaken using UAV

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland: LISCLOONADEA

Solid Geology:
Navan Group

Substrate type:
Peat

Substrate stability:
Floating mat

River catchment: Shannon Upr

Chambin Opi

CORINE Habitats:

Pastures

Small mesotrophic lake located 3.8km due south of Mohill.

Site Description and Wetland Habitats Recorded

Small mesotrophic lake with abundant floating macrophytes. Open water surrounded by extensive stands of Phragmites reed swamp surrounding. At southern end of site willow woodland forms a zone adjacent to reed swamp with bog woodland on cutover.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

N1 General Couldn't access by foot, flew drone over site.

Management Recommendations following survey

None

Future Survey Recommendations

Site was very inaccessible, therefore surveyed remotely using UAV.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

WN6 Wet willow-alder-ash woodland

WN7 Bog woodland

Fossitt habitats surrounding site

GA1 Improved agricultural grassland

GS4 Wet grassland

PB1 Raised bogs

WD4 Conifer plantation

WN7 Bog woodland

Landuse / Management Activity

None

Impacting Activity (EU code and title)

X No threats or pressures

Threats

X No threats or pressures

Frequency of use

None noted

Intensity

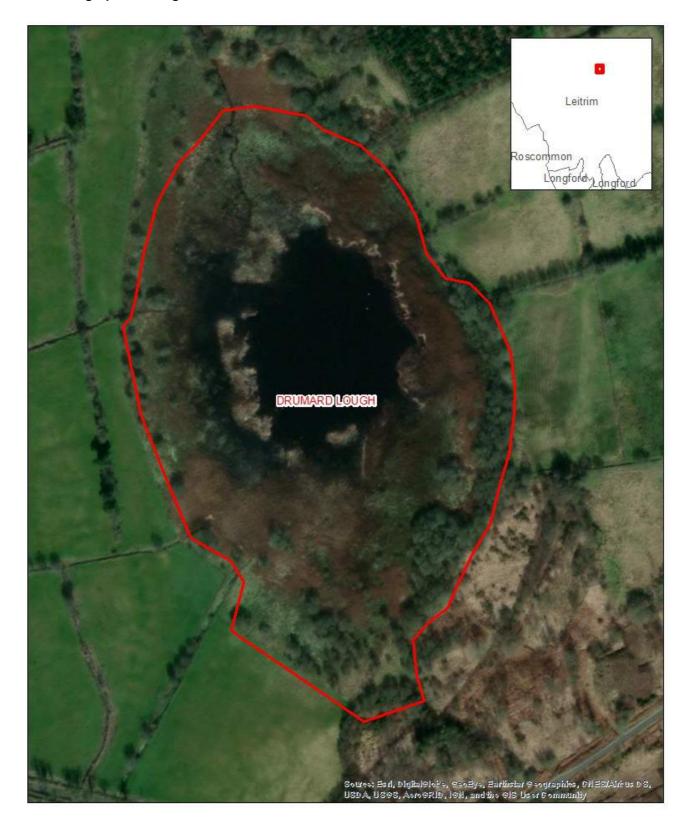
Impact

EU Habitats Directive habitats on site

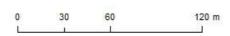
Flora on site - Latin & English species name	
Alnus glutinosa	Alder
Betula pubescens	Downy Birch
Molinia caerulea	Purple Moor-grass
Pteridium aquilinum	Bracken
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow

Fauna on site - English and Latin species name

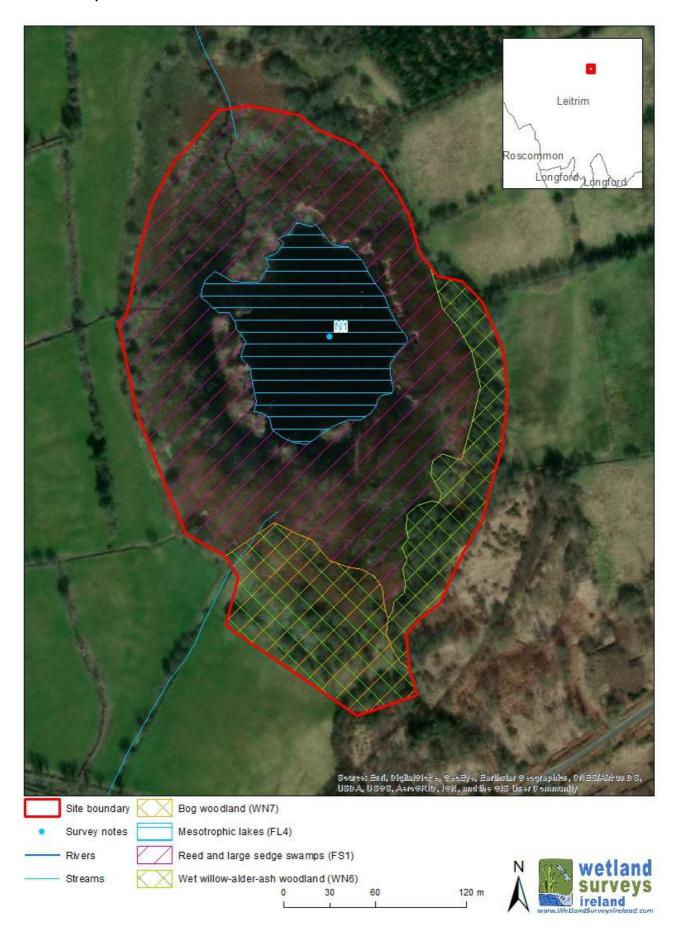
House Martin	Delichon urbicum
Swallow	Hirundo rustica











Site Name: DRUMGORMAN LOUGH

Site Code: LE154 Area (ha): 7.72 Grid Ref: 196264 308090 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

13/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland: CORNAROY

Solid Geology:	Subsoil type: Cut
Substrate type:	Substrate stability:
Mineral Soil	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Lake located 2 km north of Leitrim village along R207 which forms eastern boundary.

Site Description and Wetland Habitats Recorded

Narrow linear mesotrophic lake with narrow band of emergent vegetation dominated by Schoenoplectus lacustris with Menyanthes trifoliata and Equisetum fluviatile. Wet grassland occurs along lake shore in places. Lake used for coarse angling. On eastern site a narrow band of acid Molinia dominated wet grassland occurs together with a treeline of willow.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
N1	Invasive	Buddleia in car park.
N2	Invasive	Canadian pondweed with algae growing on it.

Management Recommendations following survey

Rmove Buddleja davidii, improve management of carpark and consider providing enhanced habitat for pollinators. Interpretative sign on ecology and value of wetlands might be considered.

Future Survey Recommendations

None

Landowner Information Comments

Car park and fishing infrastructure provided on site.

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main	Fossitt	habitats	on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

GS4 Wet grassland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WL2 Treelines

WS1 Scrub

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Frequency of use 3 Frequent (21-50%) Fishing

Amenity Management 2 Occasional (5-20%)

Impacting Activity (EU code and title) Intensity **Impact** H01.05 diffuse pollution to surface waters due to agricultural and C = low Unknown

forestry activities

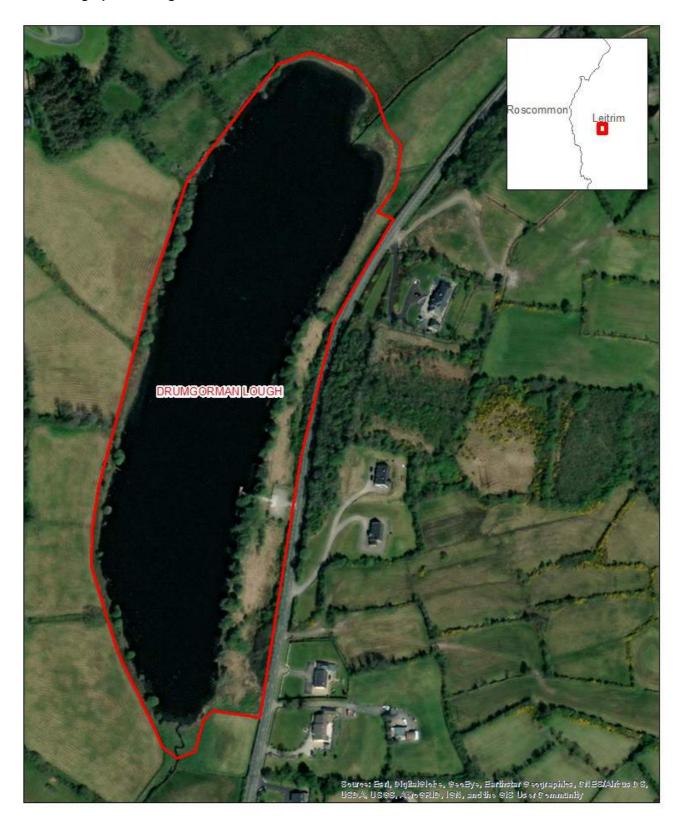
101 invasive non-native species B = medium 1 = reparable negative influence

Threats

H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species name

Leitini Wetana Field Galvey 2021	DI (OMOGINA) (14 EGGGI
Algae	
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Betula pubescens	Downy Birch
Buddleja davidii	Butterfly-bush
Calliergonella cuspidata	Pointed Spear Moss
Carex rostrata	Bottle Sedge
Chamerion angustifolium	Rosebay Willowherb
Comarum palustre	Marsh Cinquefoil
Deschampsia cespitosa	Tufted Hair-grass
Elodea canadensis	Canadian Waterweed
Epilobium hirsutum	Great Willowherb
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Iris pseudacorus	Yellow Iris
Juncus articulatus	Jointed Rush
Juncus effusus	Soft-rush
Menyanthes trifoliata	Bogbean
Molinia caerulea	Purple Moor-grass
Nuphar lutea	Yellow Water-lily
Phleum pratense	Timothy
Plantago lanceolata	Ribwort Plantain
Potentilla erecta	Tormentil
Prunella vulgaris	Selfheal
Ranunculus flammula	Lesser Spearwort
Ranunculus flammula	Lesser Spearwort
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Succisa pratensis	Devil's-bit Scabious
Typha latifolia	Bulrush
Veronica beccabunga	Brooklime
Fauna on site - English and Latin species name	
Grey Heron	Ardea cinerea
House Martin	Delichon urbicum
Pike	Esox lucius
Pond Skater species	Gerris spp.
Roach	Rutilus rutilus
Tench	Tinca tinca











Site Name: DRUMHALLAGH AND CLOONE LOUGH WETLAND

Site Code: LE114 Area (ha): 37.14 Grid Ref: 213609 299594 County: LE



Site designation(s):

PNR

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

DRUMHALLAGH

Solid Geology:	Subsoil type:
Visean basinal limestone	Cut
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment: Shannon Upr

CORINE Habitats:

Peat bogs

Amenity park located nearby Cloon, County Leitrim. Bóthar Na Naomh is a short looped walk at the village of Cloone. The total length of available trails is 5.75 km.

Site Description and Wetland Habitats Recorded

Amenity park with mesotrophic lake and extensive areas of historic cutover bog colonised by birch woodland and reed swamp.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment NA NA None

Management Recommendations following survey

Develop additional ecological interpretation facilities and signage.

Future Survey Recommendations

None

Landowner Information Comments

Public park.

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

BL3 Buildings and artificial surfaces

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

PB4 Cutover bog

WN7 Bog woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Amenity Management 3 Frequent (21-50%)

Impacting Activity (EU code and title)

Intensity Impact

Frequency of use

J02.05 Modification of hydrographic functioning, general

B = medium - 1 = reparable negative influence

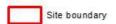
G01 Outdoor sports and leisure activities, recreational activities B = medium 0 = neutral

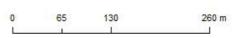
Threats

Flora on site - Latin & English species name	
Betula pubescens	Downy Birch
Carex rostrata	Bottle Sedge
Comarum palustre	Marsh Cinquefoil

Marsh Cinquefoil
Meadowsweet
Yellow Iris
Soft-rush
Purple Moor-grass
Yellow Water-lily
Common Reed
Tormentil
Bulrush
Gorse
Common Nettle
Common Valerian
Rana temporaria
Cygnus olor











Site Name: DRUMLEEVAN WEST

Site Code: LE191 Area (ha): 5.22 Grid Ref: 223359 307630 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

D Rating: Local conservation value (moderate value)

Townland:

DRUMLEEVAN

Solid Geology:	Subsoil type:
Navan Group	Cut
Substrate type:	Substrate stability:
Peat	Firm

River catchment:

Erne

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Wet woodland site on likely former cutaway located at Drumleevan.

Site Description and Wetland Habitats Recorded

Woodland is dominated by mature birch at southern end with some ash around the periphery. The woodland is heavily drained and has an understorey dominated by nettle and bramble. Further north there is an abundance of willow which forms dense stands.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

Consider installation of walkway for local school which occurs closeby.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FW4 Drainage ditches

WN6 Wet willow-alder-ash woodland

WN7 Bog woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

None

Impacting Activity (EU code and title)

J02.05 Modification of hydrographic functioning, general

Frequency of use

Intensity

Impact A = high- 2 = irreparable negative

Threats

J02.05 Modification of hydrographic functioning, general

Flora on site - Latin & English species nan	ne
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Betula pubescens	Downy Birch
Crataegus monogyna	Hawthorn
Deschampsia cespitosa	Tufted Hair-grass
Epilobium hirsutum	Great Willowherb
Filipendula ulmaria	Meadowsweet
Fraxinus excelsior	Ash

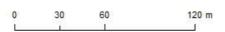
Fraxinus excelsior	Ash	
Glyceria fluitans	Floating Sweet-grass	
Hedera helix	lvy	
Phragmites australis	Common Reed	
Prunus spinosa	Blackthorn	
Rubus fruticosus agg.	Blackberry	
Salix cinerea subsp. cinerea	Grey Willow	
Stachys palustris	Marsh Woundwort	
Typha latifolia	Bulrush	
Urtica dioica	Common Nettle	

Fauna on site - English and Latin species name

No faunal observations were made











Site Name: GANGIN AND MOSYS LOUGHS

Site Code: LE199 Area (ha): 14.43 Grid Ref: 223894 302720 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

BREDAGH

Solid Geology: Derryveeny Formation	Subsoil type: Water
Substrate type:	Substrate stability:
Mineral Soil	Soft Ground
Peat	

River catchment:

Erne

CORINE Habitats:

Pastures

Two adjacent lakes with surrounding wetland habitats located just south-east of Carrigallen.

Site Description and Wetland Habitats Recorded

Two similar mesotrophic lakes with floating macrophytes and a narrow band of Phragmites reed swamp. Wet grassland occurs in the low lying areas surroundings the lake, while intensive agriculture is practiced on the more elevated lands in the surroundings.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

Adjoining landowner was very accomodating and facilitated access.

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

WN6 Wet willow-alder-ash woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Frequency of use

Grazing - cattle

3 Frequent (21-50%)

Impacting Activity (EU code and title)

Intensity

Impact

H01.05 diffuse pollution to surface waters due to agricultural and A = high

Unknown

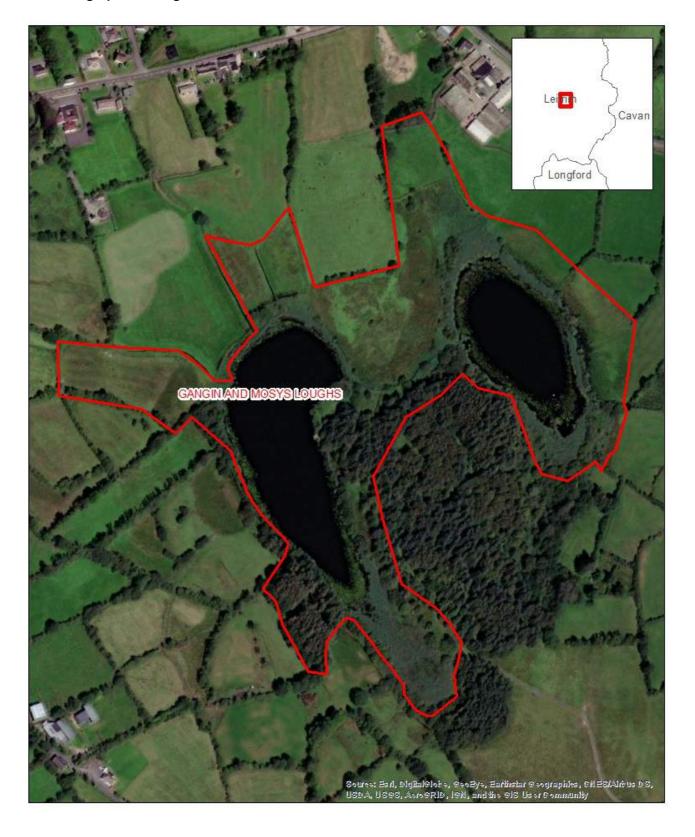
forestry activities

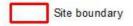
Threats

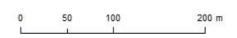
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species name		
Calystegia sepium	Hedge Bindweed	
Crataegus monogyna	Hawthorn	
Holcus lanatus	Yorkshire-fog	
Juncus effusus	Soft-rush	
Nuphar lutea	Yellow Water-lily	

Nymphaea alba	White Water-lily	
Phragmites australis	Common Reed	
Ranunculus flammula	Lesser Spearwort	
Rubus fruticosus agg.	Blackberry	
Salix cinerea subsp. cinerea	Grey Willow	
Typha latifolia	Bulrush	
Fauna on site - English and Latin species name		
Cormorant	Phalacrocorax carbo	
Grey Heron	Ardea cinerea	











Site Name: KILLYLEA LOUGH AND WETLAND

Site Code: LE277 Area (ha): 17.16 Grid Ref: 213919 301064 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

DRUMHALLAGH

Solid Geology: Visean basinal limestone	Subsoil type: Water
Substrate type:	Substrate stability:
Mineral Soil	Soft Ground
Peat	

River catchment:

Shannon Upr

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Lake and wet woodland complex located 6km east of Mohill.

Site Description and Wetland Habitats Recorded

This lake is surrounded by a narrow band of Phragmites australis red swamp. The lake is used for coarse fishing with access from the main road. An extensive area of willow woodland occurs to the south, part of which has been subject to infilling.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

Reduce inputs from reseeded field adjacent to eastern side of lake.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Wet willow woodland may correspond with EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

GA1 Improved agricultural grassland

GS4 Wet grassland

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

EU Habitats Directive habitats on site

91E0 *Alluvial forests with Alnus glutinosa and

Landuse / Management Activity	Frequency of use		
Fishing	3 Frequent (21-50%)		
Forestry	1 Rare (<5%)		

Forestry 1 Rare (<5%)

Impacting Activity (EU code and title)IntensityImpactF02.03 Leisure fishingC = lowUnknownB02 Forest and Plantation management & useC = lowUnknownH01.05 diffuse pollution to surface waters due to agricultural and C = lowUnknown

forestry activities

I01 invasive non-native species B = medium Unknown

Threats

B02 Forest and Plantation management & use

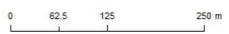
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

101 invasive non-native species

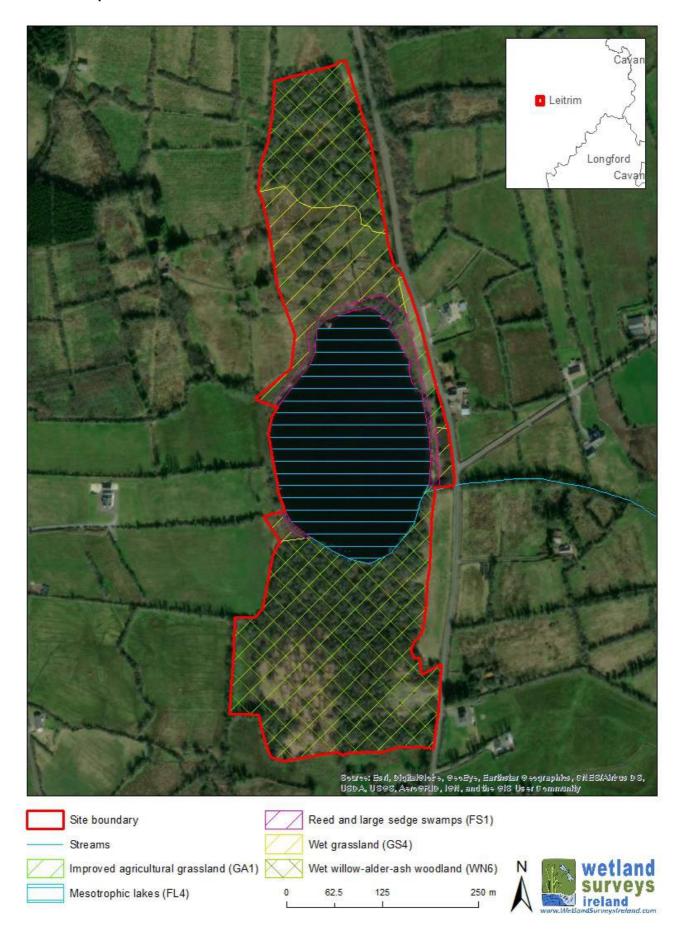
Flora on site - Latin & English species name	
Angelica sylvestris	Wild Angelica
Calliergonella cuspidata	Pointed Spear Moss
Caltha palustris	Marsh-marigold
Cardamine pratensis	Cuckooflower
Elodea canadensis	Canadian Waterweed
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Holcus lanatus	Yorkshire-fog
Juncus effusus	Soft-rush
lemna trisulca	Ivy-leaved Duckweed
Mentha aquatica	Water Mint
Mentha aquatica	Water Mint
Phragmites australis	Common Reed
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Fauna on site - English and Latin species name	
Coarse fish various	NA
Small White	Pieris rapae











Site Name: KILMADDAROE LOUGH

Site Code: LE159 Area (ha): 33.01 Grid Ref: 197681 301833 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

17/09/2021

Survey Code:

LEWS2021

Site source information:

Additional Survey may be required Preliminary Wetland field inspection undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

KILTOGHERT

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Large lake located 4km east of Carrick-on-Shannon.

Site Description and Wetland Habitats Recorded

Large lake is surrounded by narrow reed fringe with Schoenoplectus lacustris and extensive wet peaty grassland and scattered low willow scrub to the southwest. Drainage works were recently completed in peaty grassland area.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Site not accessed by foot, viewed from road side at a distance. N1 General

Management Recommendations following survey

Consider blocking drains in recently drained peaty area to southwest of lake.

Future Survey Recommendations

Recommend future visit to site to assess the value of wetland habitat (likely wet grassland on peat) to southwest.

Landowner Information Comments

None. Not possible to access site for survey due to presence of livestock and unable to get permission from landowners.

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fo	ossitt	habit	tats c	on site
---------	--------	-------	--------	---------

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

WL1 Hedgerows

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Grazing - horses

Frequency of use

3 Frequent (21-50%)

Impacting Activity (EU code and title)

H01.05 diffuse pollution to surface waters due to agricultural and B = medium

Intensity **Impact**

Unknown

forestry activities

J02.05 Modification of hydrographic functioning, general

- 1 = reparable negative influence B = medium

Threats

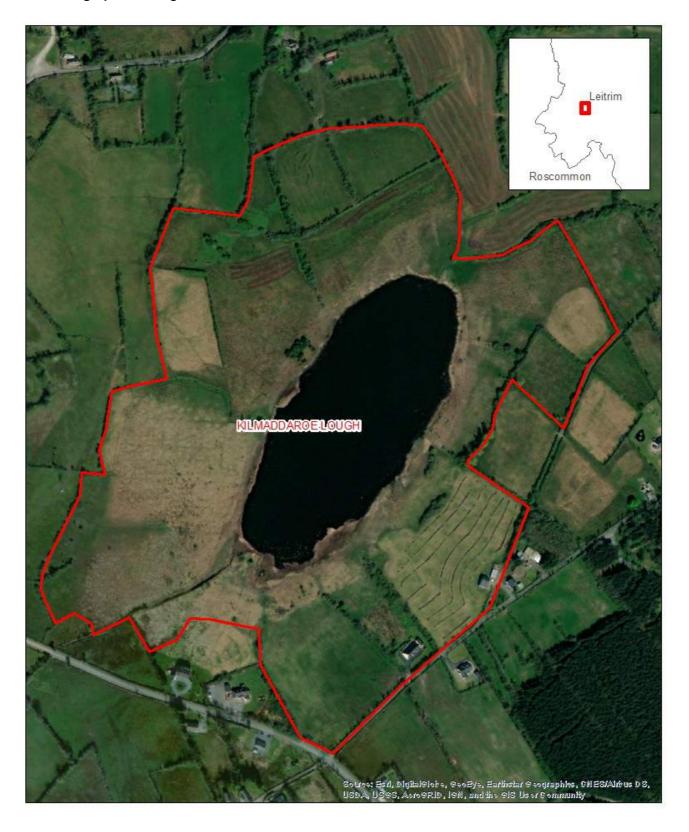
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

J02.05 Modification of hydrographic functioning, general

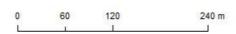
Flora on site - Latin	۱&	Enalish	species	name
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riora en elle Latin a Liighen epecies name		
Agrostis stolonifera	Creeping Bent	
Angelica sylvestris	Wild Angelica	
Carex rostrata	Bottle Sedge	
Cirsium palustre	Marsh Thistle	

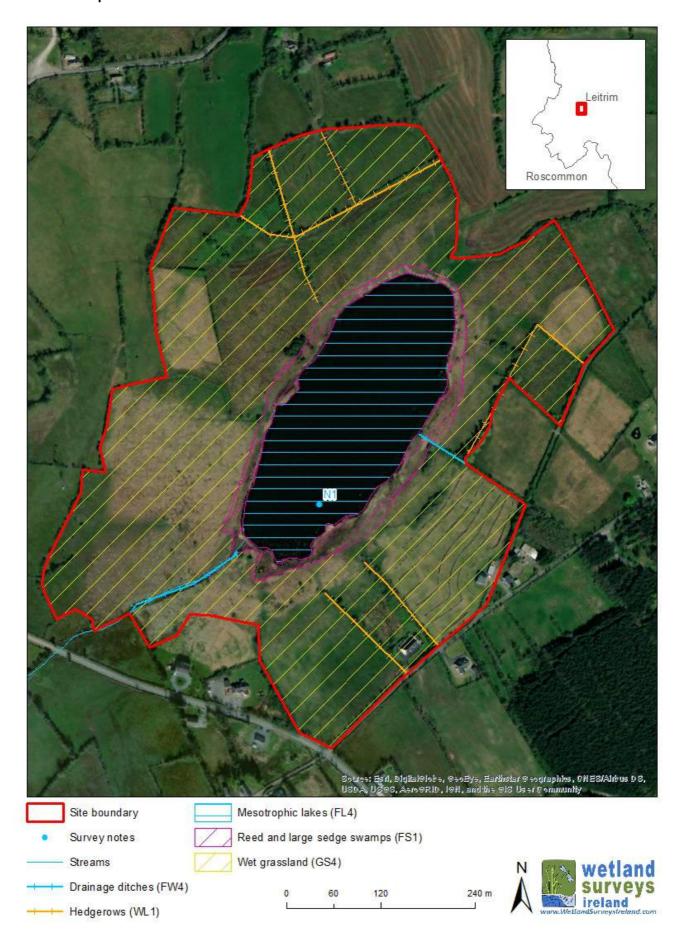
Epilobium hirsutum	Great Willowherb	
Equisetum fluviatile	Water Horsetail	
Filipendula ulmaria	Meadowsweet	
Galium palustre	Marsh-bedstraw	
Juncus effusus	Soft-rush	
Menyanthes trifoliata	Bogbean	
Molinia caerulea	Purple Moor-grass	
Salix aurita	Eared Willow	
Salix cinerea subsp. cinerea	Grey Willow	
Schoenoplectus lacustris	Common Club-rush	
Typha latifolia	Bulrush	
Fauna on site - English and Latin species name		
Mute Swan	Cygnus olor	











Site Name: LAHEEN LOUGH

Site Code: LE192 Area (ha): 20.05 Grid Ref: 226008 307178 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

KILLYGAR

Solid Geology:	Subsoil type:
Courceyan limestone	Water
Substrate type:	Substrate stability:
Mineral Soil	Firm

River catchment:

Erne

CORINE Habitats:

Inland marshes

Lake with fringing wetland and woodland located on the County Cavan/ ILeitrim border ca 4.8km north-east of Carrigallen.

Site Description and Wetland Habitats Recorded

Mesotrophic lake with some floating water lilies and emergent Phragmites reed swamp. A river exits the site at the southern end. Well established willow and alder woodland surrounds much of the lake and grades into drier woodland further up slope. Extensive marsh and wet grassland surrounds much of the lake to the northern side.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

N1 Damage Livestock drinking point. Green algae in water. Bare soil visible.

Management Recommendations following survey

Restrict livestock access along northern end by creating a fenced buffer zone.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

GM1 Marsh

GS4 Wet grassland

WD2 Mixed broadleaved/conifer woodland

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW2 Depositing/lowland rivers

GA1 Improved agricultural grassland

GS4 Wet grassland

WD2 Mixed broadleaved/conifer woodland

WD4 Conifer plantation

WL1 Hedgerows

EU Habitats Directive habitats on site

91E0 *Alluvial forests with Alnus glutinosa and

Landuse / Management Activity

Grazing - sheep Grazing - cattle

Impacting Activity (EU code and title)

A04.02 non intensive grazing

Frequency of use

2 Occasional (5-20%)

2 Occasional (5-20%)

Intensity Impact

B = medium - 1 = reparable negative influence

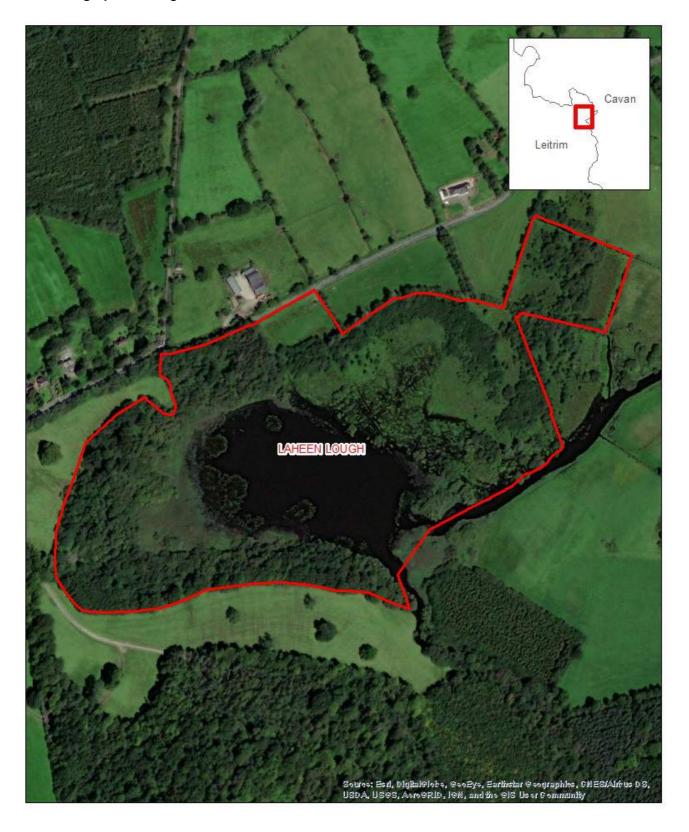
Threats

A04.02 non intensive grazing

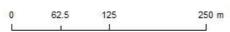
Flora on site - Latin & English species name

Algae

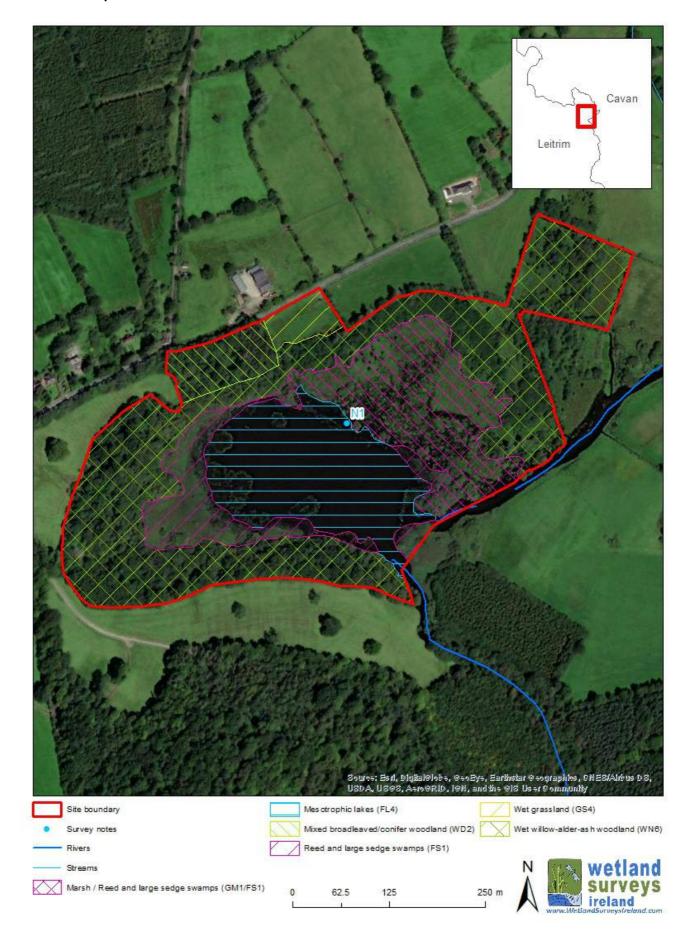
Leitilli Welland Field Survey 2021	LAHLLIN LOOGH
Alnus glutinosa	Alder
Caltha palustris	Marsh-marigold
Cardamine pratensis	Cuckooflower
Carex paniculata	Greater Tussock-sedge
Carex rostrata	Bottle Sedge
Carex sp.	poss. C. acutiformis
Cirsium palustre	Marsh Thistle
Comarum palustre	Marsh Cinquefoil
Crataegus monogyna	Hawthorn
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Fraxinus excelsior	Ash
Galium palustre	Marsh-bedstraw
Hedera helix	lvy
Hydrocotyle vulgaris	Marsh Pennywort
Iris pseudacorus	Yellow Iris
Juncus acutiflorus	Sharp-flowered Rush
Juncus effusus	Soft-rush
Lysimachia nummularia	Creeping-Jenny
Lythrum salicaria	Purple-loosestrife
Nuphar lutea	Yellow Water-lily
Nymphaea alba	White Water-lily
Oenanthe aquatica	Fine-leaved Water-dropwort
Persicaria hydropiper	Water-pepper
Persicaria sp.	Bistort
Phragmites australis	Common Reed
Potentilla anserina	Silverweed
Quercus spp.	Oak
Ranunculus flammula	Lesser Spearwort
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Senecio aquaticus	Marsh Ragwort
Urtica dioica	Common Nettle
Viola palustris	Marsh Violet
Fauna on site - English and Latin species name	
Coarse fish various	NA
Dragon and Damselflies various	
House Martin	Delichon urbicum
Large Black Slug	Arion ater
Mallard	Anas platyrhynchos











Site Name: LEITRIM TURLOUGH cNHA

Site Code: LE57 Area (ha): 22.82 Grid Ref: 197583 304249 County: LE



Site designation(s):

cNHA

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

13/09/2021

Survey Code:

LEWS2021

Site source information:

Additional Survey may be required Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

Ballinwing BELLAGART

Solid Geology:

Marine shelf facies

Cut

Substrate type:

Mineral Soil

Substrate stability:

Very firm

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Large fluctuating lake located 2km east of Leitrim village.

Site Description and Wetland Habitats Recorded

Fluctuating lake with extensive reed swamp dominated by Schoenoplecrus lacustris. Towards margin of basin Sparganium erectum is dominant. Abrupt margin to wet grassland habitat. Although little zonation present and high September water level the lake does flood somewhat in winter suggesting the site has some affinity to turlough.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment NA NA None

Management Recommendations following survey

Prevent livestock access to lake edge.

Future Survey Recommendations

Detailed turlough survey recommended.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Unclear whether this site is Annex 1 EU habitat turlough. Fluctuating lake, water level appear not to retreat much. Little zonation.

Main Fossitt habitats on site

FL6 Turloughs

FS1 Reed and large sedge swamps

GM1 Marsh

GS4 Wet grassland

WL1 Hedgerows

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

WL1 Hedgerows

WL2 Treelines

WS1 Scrub

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Grazing - cattle

1 Rare (<5%)

Frequency of use

Impacting Activity (EU code and title)

A04.02.01 non intensive cattle grazing

Intensity Impact
B = medium Unknown

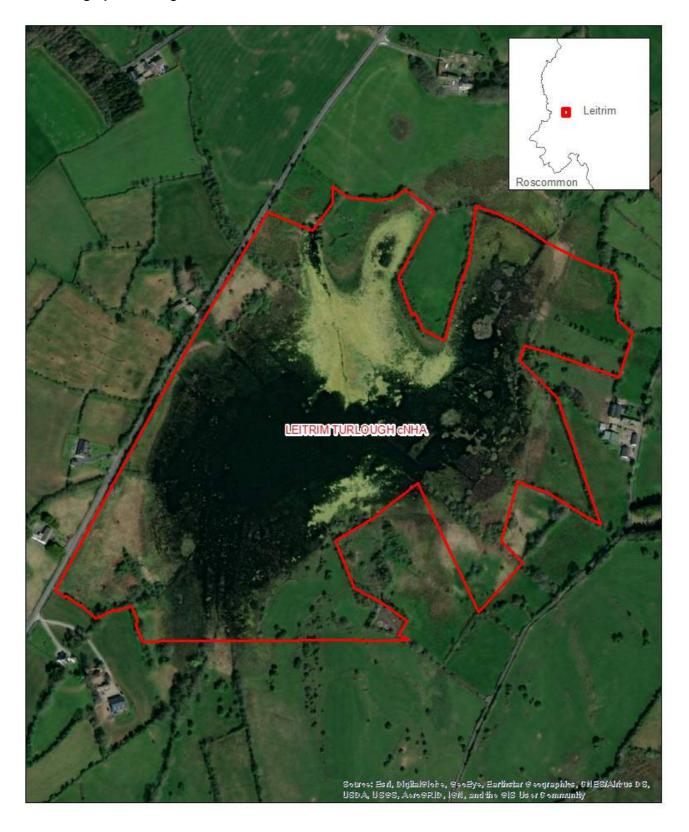
Threats

A04.02.01 non intensive cattle grazing

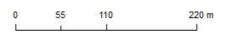
Flora on site - I	Latin &	English s	pecies	name
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riora on one Latin & Linguistropeoles han	iic
Alisma plantago-aquatica	Water-plantain
Caltha palustris	Marsh-marigold
Cardamine pratensis	Cuckooflower
Carex paniculata	Greater Tussock-sedge
Crataegus monogyna	Hawthorn

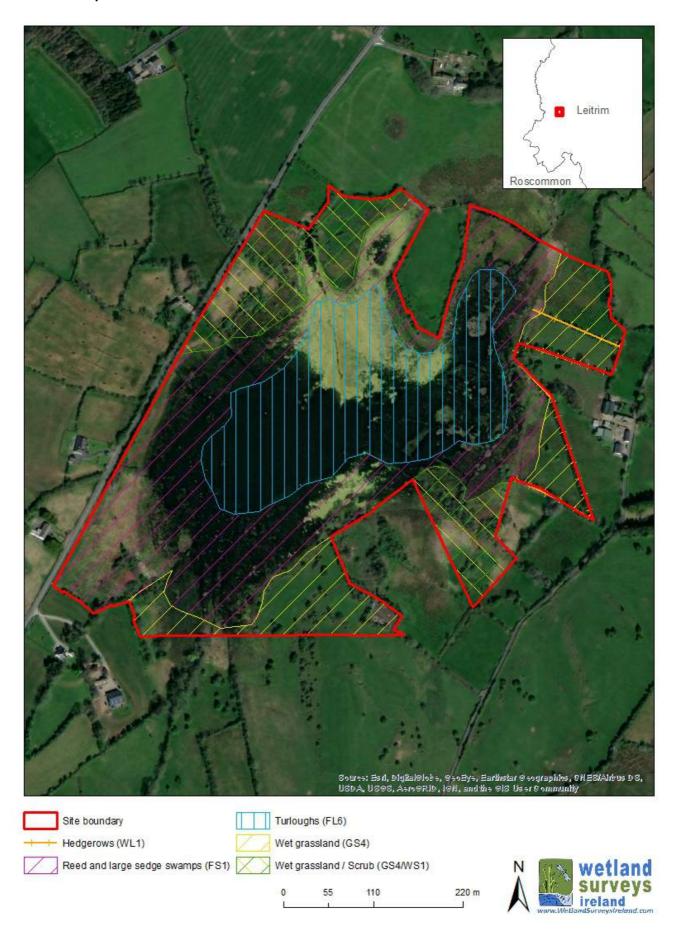
Lettim Wettand Field Gulvey 2021	ELITHIN TOREGOOT GNIZ
Filipendula ulmaria	Meadowsweet
Filipendula ulmaria	Meadowsweet
Fraxinus excelsior	Ash
Galium palustre	Marsh-bedstraw
Galium palustre	Marsh-bedstraw
Hydrocotyle vulgaris	Marsh Pennywort
Iris pseudacorus	Yellow Iris
Juncus effusus	Soft-rush
Juncus effusus	Soft-rush
Juncus inflexus	Hard Rush
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Myosotis laxa	Tufted forget-me-not
Oenanthe aquatica	Fine-leaved Water-dropwort
Persicaria hydropiper	Water-pepper
Phalaris arundinacea	Reed Canary-grass
Plantago major	Greater Plantain
Potentilla anserina	Silverweed
Prunella vulgaris	Selfheal
Ranunculus repens	Creeping Buttercup
Rubus fruticosus agg.	Blackberry
Rumex obtusifolius	Broad-leaved Dock
Schoenoplectus lacustris	Common Club-rush
Senecio aquaticus	Marsh Ragwort
Sparganium erectum	Branched Bur-reed
Fauna on site - English and Latin species name	
Common Frog	Rana temporaria
Coot	Fulica atra
House Martin	Delichon urbicum
Moorhen	Gallinula chloropus
Swallow	Hirundo rustica











Site Name: LOUGH ANNAGHMACONWAY cNHA

Site Code: LE8 Area (ha): 23.38 Grid Ref: 213200 299700 County: LE



Site designation(s):

cNHA

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

ANNAGHMACONWAY

Solid Geology:	Subsoil type:
Visean basinal limestone	Water
Substrate type:	Substrate stability:
Mineral Soil	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Peat bogs

Lake located within amenity park at Cloon, County Leitrim.

Site Description and Wetland Habitats Recorded

Mesotrophic lake with fringing reed swamp and a small area of willow woodland. The lake is used for fishing and there is a wide range of visitor amenities including a bird hide. Agricultural grassland occurs to the west of the lake.

Target Notes - (see Habitat Map for location of Target Notes)

Comment No. Category None NA NA

Management Recommendations following survey

Enhance ecological interpretation through signage at the site.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

BL3 Buildings and artificial surfaces

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

WD4 Conifer plantation

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Frequency of use

Landuse / Management Activity

Fishing 2 Occasional (5-20%) Boating 2 Occasional (5-20%)

Impacting Activity (EU code and title)

Intensity **Impact** F02.03 Leisure fishing C = lowUnknown

D01.01 paths, tracks, cycling tracks C = low0 = neutral

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

Threats

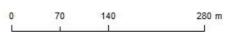
D01.01 paths, tracks, cycling tracks

H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

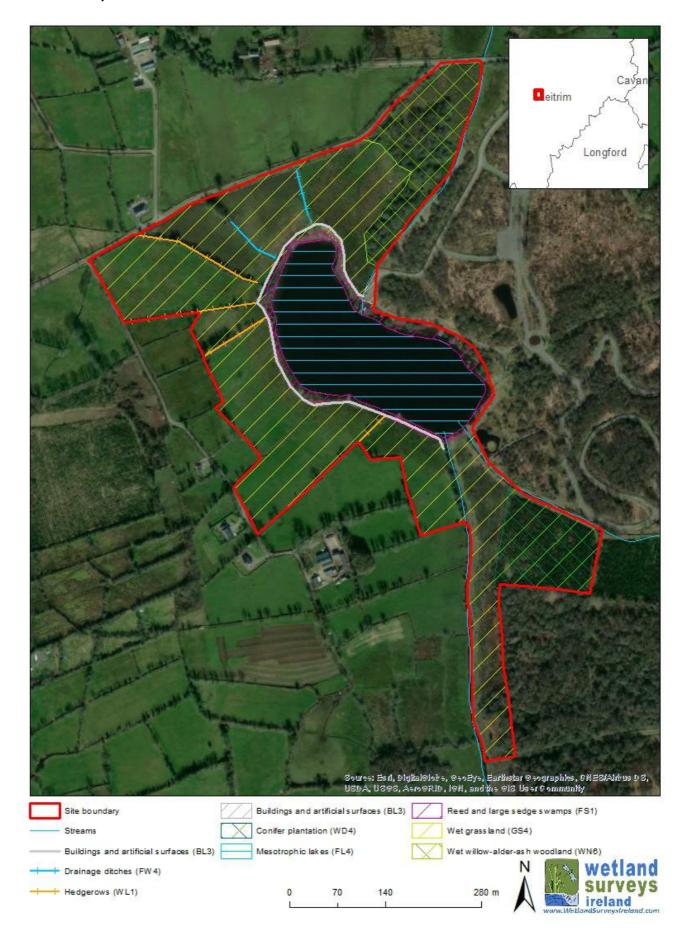
Flora on site - Latin & English species name	
Alisma plantago-aquatica	Water-plantain
Alopecurus geniculatus	Marsh Foxtail
Betula pubescens	Downy Birch
Caltha palustris	Marsh-marigold
Carex rostrata	Bottle Sedge
Comarum palustre	Marsh Cinquefoil
Deschampsia cespitosa	Tufted Hair-grass
Filipendula ulmaria	Meadowsweet
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Hydrocotyle vulgaris	Marsh Pennywort
Juncus effusus	Soft-rush
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Myosotis laxa	Tufted forget-me-not
Oenanthe crocata	Hemlock Water-dropwort
Phalaris arundinacea	Reed Canary-grass
Phragmites australis	Common Reed
Potentilla anserina	Silverweed
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Salix cinerea subsp. cinerea	Grey Willow
Schedonorus arundinaceus	Tall Fescue
Schoenoplectus lacustris	Common Club-rush
Sparganium erectum	Branched Bur-reed
Typha latifolia	Bulrush
Valeriana officinalis	Common Valerian
Vicia cracca	Tufted Vetch
auna on site - English and Latin species name	•
Moorhen	Gallinula chloropus











Site Name: LOUGH MOREOGE

Site Code: LE220 Area (ha): 6.44 Grid Ref: 207820 309691 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

BRANRA

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type: Peat	Substrate stability: Quaking

River catchment:

Erne

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Small lake in rural setting located 6.2km north-west of Ballinamore.

Site Description and Wetland Habitats Recorded

A small lake in natural setting. Lake is surrounded by non-intensively managed farmland to north, east, and west. To the south is a public road and adjoining mature conifer plantation. Adjacent to forestry. Extensive Phragmites reed swamp and wet willow woodland surrounds the lake.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category	Comment
--------------	---------

N1 Invasive Snowberry at edge of reed swamp. Does not look like it is surviving in wet conditions. Photos 9360

-9363.

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Areas of wet willow woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

Main Fossitt habitats on site

FL4 Mesotrophic lakes

EU Habitats Directive habitats on site

91E0 *Alluvial forests with Alnus glutinosa and

FS1 Reed and large sedge swamps

WN6 Wet willow-alder-ash woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

Landuse / Management Activity

Frequency of use

None

Impacting Activity (EU code and title)

Intensity

Impact

H01.05 diffuse pollution to surface waters due to agricultural and C = low Unknown forestry activities

Threats

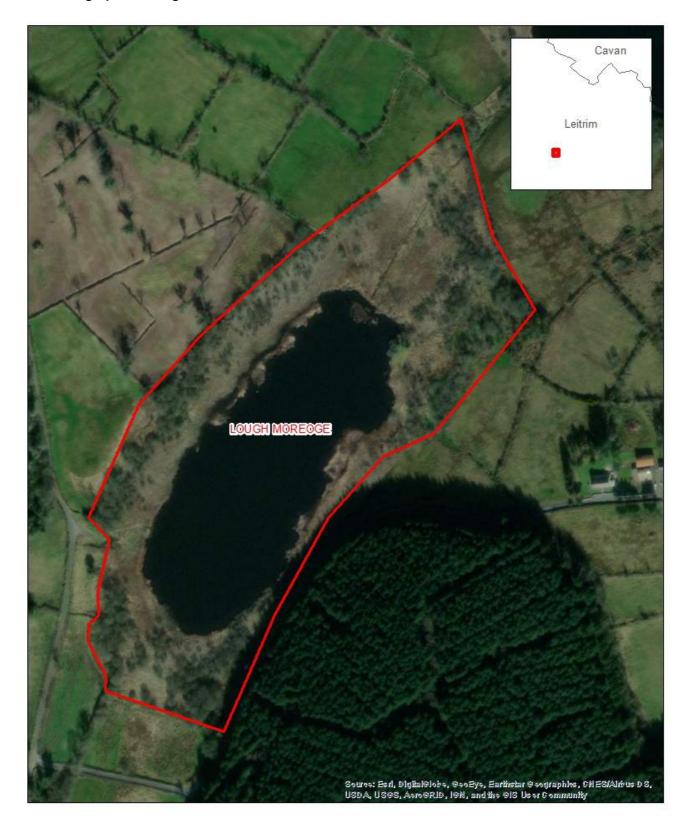
B02 Forest and Plantation management & use

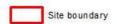
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

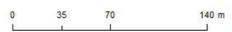
Flora on site - Latin & English species name	
Alnus alutinosa	

Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Caltha palustris	Marsh-marigold
Carex rostrata	Bottle Sedge
Cicuta virosa	Cowbane

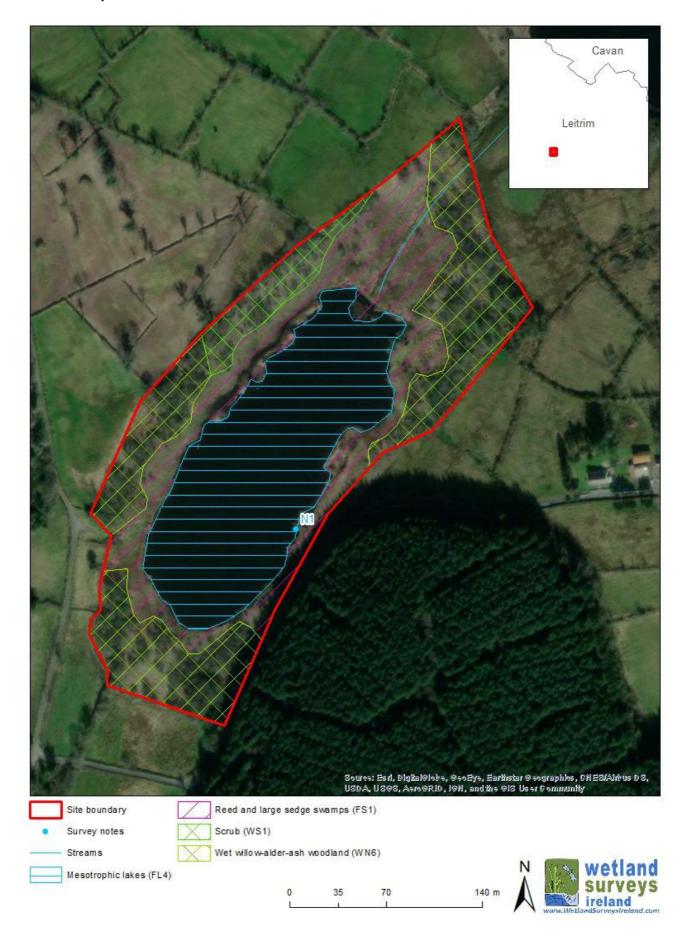
Cirsium palustre	Marsh Thistle
Comarum palustre	Marsh Cinquefoil
Epilobium hirsutum	Great Willowherb
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Juncus effusus	Soft-rush
Menyanthes trifoliata	Bogbean
Nuphar lutea	Yellow Water-lily
Phragmites australis	Common Reed
Symphoricarpos albus	Snowberry
Typha latifolia	Bulrush
Fauna on site - English and Latin species name	
Common frog	Rana temporaria
Mute Swan	Cygnus olor











Site Name: LOUGH NACARRIGA

Site Code: LE184 Area (ha): 23.77 Grid Ref: 207221 310322 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

DRUMROOSK NORTH

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Substrate type: Mineral Soil	Substrate stability: Firm

River catchment:

Erne

CORINE Habitats:

Water bodies

Large lake with very narrow fringe of reed swamp located 6.4km north-west of Ballinamore.

Site Description and Wetland Habitats Recorded

Large open water lake surrounded by a narrow stand of Schoenoplectus lacustris. The lake edge is bounded by intensively managed agricultural lands to the west and south. A public road passes the site along its eastern boundary. The lake itself supports a range of water birds including Great-crested Grebe, Coot, and Cormorant.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

Consider installing interpretative signage.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Frequency of use

Grazing - cattle

2 Occasional (5-20%)

Impacting Activity (EU code and title)

Intensity

Impact

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

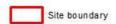
Threats

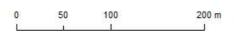
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species nam	e
Angelica sylvestris	Wild Angelica
Calystegia sepium	Hedge Bindweed
Carex rostrata	Bottle Sedge
Epilobium hirsutum	Great Willowherb
Filipendula ulmaria	Meadowsweet
Mentha aquatica	Water Mint
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush

Typha latifolia	Bulrush	
Urtica dioica	Common Nettle	
Vicia cracca	Tufted Vetch	
Forms on site. Finalish and Latin anssis		
Fauna on site - English and Latin species	s name	
Coot	s name Fulica atra	
_		
Coot	Fulica atra	











Site Name: LOUGH NAHOO cNHA

Site Code: LE56 Area (ha): 20.01 Grid Ref: 181280 332140 County: LE



Site designation(s):

cNHA

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

13/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed site survey (NFS) recommended Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature Wetland Survey undertaken using UAV

Wetland Present on the Site

YES

Conservation ranking after survey:

A Rating: Internationally Important

Townland:

FAWN (Drumahaire By) MULLAGH (Drumahaire By)

Solid Geology:	Subsoil type:
Slishwood Division	Cut
Substrate type: Mineral Soil	Substrate stability: Floating mat

River catchment:

Garvogue

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Fluctuating lake with extensive transition mire and marginal wetlands within nom-intensively managed farmland landscape ca 2 km to the west of Dromahair.

Site Description and Wetland Habitats Recorded

The site is a combination of swamp, Alluvial woodland and Transition mire. Fluctuating lake with extensive wetland habitat extending to the west. Transition mire dominated by Equisetum and Carex rostrata is extensive with pockets of willow scrub. Species rich wet grassland surrounds the wetland habitat and local groundwater seepages support fen type communities.

Target Notes - (see Habitat Map for location of Target Notes)

No. N2	Category General	Comment Seepage zone, ground water influence. Fen. Brown mosses present.
N1	Invasive	Snowberry at edge of grassy verge.

Management Recommendations following survey

None

Future Survey Recommendations

Recommend detailed fen survey.

Landowner Information Comments

Central part of site was very inaccessible, therefore surveyed remotely using UAV.

Description of potential EU Habitats Directive Annex 1 habitats

This site contains excellent example of 7140 Transition mires and quaking bogs which is a habitat listed under Annex I of the EU Habitats Directive. Some of the areas of wet woodland within the site may correspond to the EU

Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incana Salicion albae).		
Main Fossitt habitats on site	EU Habitats Directive habitats on site	
BL3 Buildings and artificial surfaces	7140 Transition mires and quaking bogs	
FL Lakes & Ponds	91E0 *Alluvial forests with Alnus glutinosa and	

GM1 Marsh

GS4 Wet grassland

PF3 Transition mire & quaking bog

WN6 Wet willow-alder-ash woodland

WS1 Scrub

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL2 Treelines

WN Semi-natural woodland

WS1 Scrub

Landuse / Management Activity Frequency of use Grazing - cattle 3 Frequent (21-50%)

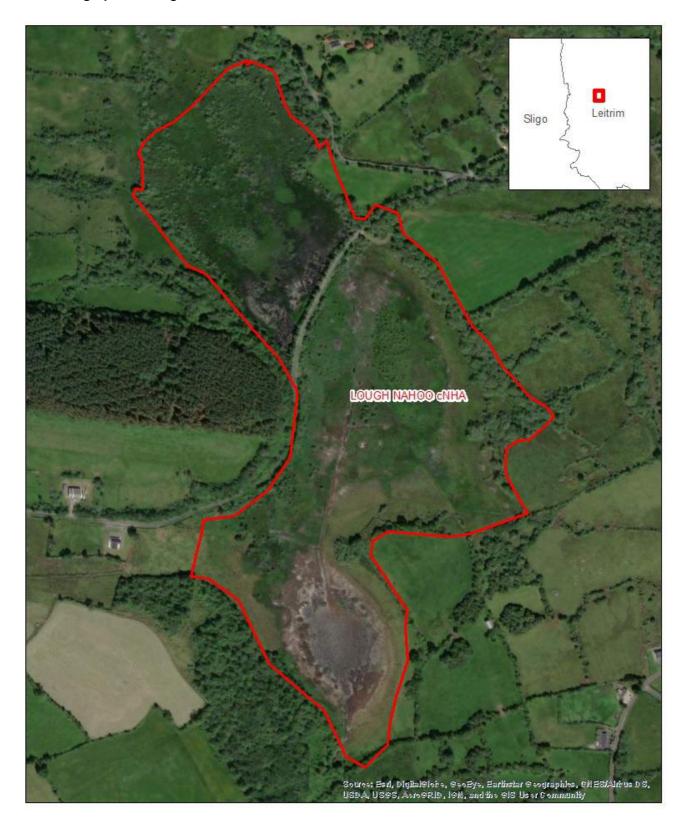
Impacting Activity (EU code and title) Intensity **Impact** A04.02.01 non intensive cattle grazing C = low0 = neutral

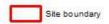
Threats

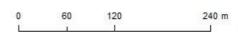
X No threats or pressures

Alisma plantago-aquatica	Water-plantain
Alnus glutinosa	Alder
Anagallis tenella	Bog Pimpernel
Angelica sylvestris	Wild Angelica
Berula erecta	Lesser Water-parsnip
Betula pubescens	Downy Birch
Bidens cernua	Nodding Bur-marigold
Cardamine pratensis	Cuckooflower
Carex rostrata	Bottle Sedge
Comarum palustre	Marsh Cinquefoil
Eleocharis palustris	Common Spike-rush
Epilobium sp.	Willowherb
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Hippuris vulgaris	Mare's-tail
Hydrocotyle vulgaris	Marsh Pennywort
Hypochaeris radicata	Cat's-ear
Iris pseudacorus	Yellow Iris
Juncus effusus	Soft-rush
Lythrum salicaria	Purple-loosestrife
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Myosotis sp.	Forget-me-not
Parnassia palustris	Grass-of-Parnassus
Pedicularis palustris	Marsh Lousewort
Potamogeton natans	Broad-leaved Pondweed
Potentilla anserina	Silverweed
Ranunculus flammula	Lesser Spearwort
Salix cinerea subsp. cinerea	Grey Willow
Salix repens	Creeping Willow
Senecio aquaticus	Marsh Ragwort
Sparganium erectum	Branched Bur-reed
Succisa pratensis	Devil's-bit Scabious
Typha latifolia	Bulrush
Valeriana officinalis	Common Valerian
Veronica scutellata	Marsh Speedwell
Vibbernum	Gelderrose
Fauna on site - English and Latin species name	
Common Snipe	Gallinago gallinago
Dragon and Damselflies various	
Small Tortoiseshell	Aglais urticae

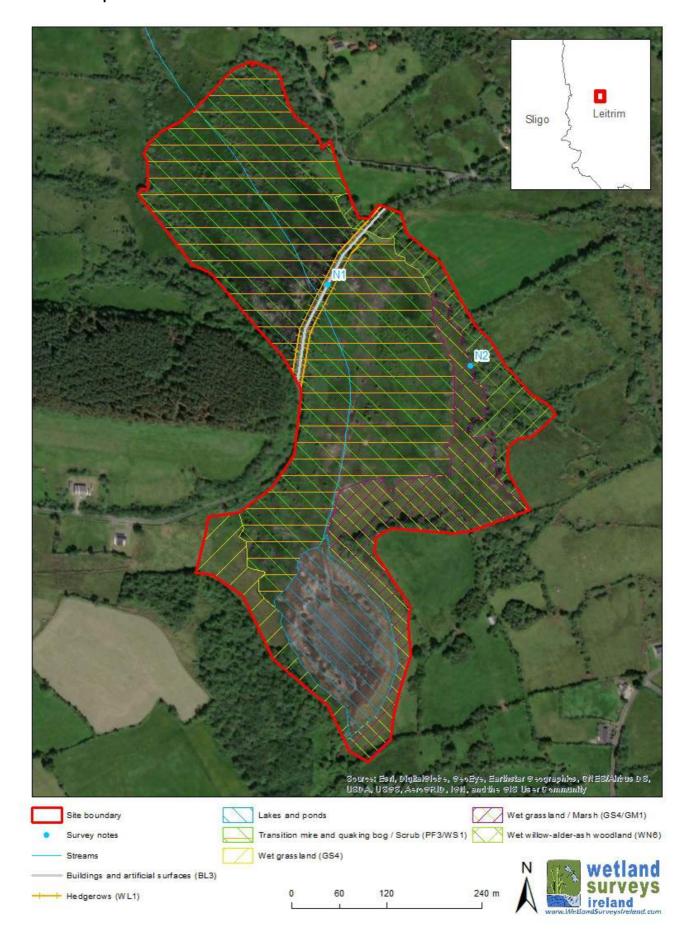
Whooper Swan	Cygnus cygnus
Wood Pigeon	Columba palumbus











Site Name: MULLAGHBOY LOUGH

Site Code: LE252 Area (ha): 5.99 Grid Ref: 218102 309195 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

ARDUNSAGHAN

Solid Geology:	Subsoil type:
Marine shelf facies	Water
Substrate type:	Substrate stability:
Peat	Firm

River catchment:

Erne

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Lake with birch woodland located 5km south of Ballinamore.

Site Description and Wetland Habitats Recorded

Lake with extensive floating macrophytes and narrow fringe of Typha latifolia. A small area of birch dominated woodland occurs at the northern extent of the site. This appears relatively dry underfoot due to past drainage. Part of the site to the north has recently been planted with conifers.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

WN7 Bog woodland

WS1 Scrub

Fossitt habitats surrounding site

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

WL2 Treelines

EU Habitats Directive habitats on site

None noted

Landuse / Management Activity

Grazing - cattle

Frequency of use

1 Rare (<5%)

Impacting Activity (EU code and title)

Intensity

Impact

H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown

forestry activities

B02 Forest and Plantation management & use

C = low

- 2 = irreparable negative

Threats

B02 Forest and Plantation management & use

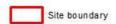
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

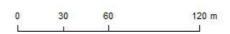
Flora	on site	۰ I atin 🎗	. Fnalish	snecies	name

Tiora on site - Latin & English species hame	
Alnus glutinosa	Alder
Betula pubescens	Downy Birch
Epilobium hirsutum	Great Willowherb
Filipendula ulmaria	Meadowsweet
Juncus effusus	Soft-rush

Mentha aquatica	Water Mint	
Menyanthes trifoliata	Bogbean	
Nuphar lutea	Yellow Water-lily	
Potamogeton natans	Broad-leaved Pondweed	
Salix cinerea subsp. cinerea	Grey Willow	
Typha latifolia	Bulrush	
Fauna on site - English and Latin species name		
Grey Heron	Ardea cinerea	
Mallard	Anas platyrhynchos	











Site Name: MULLANADARRAGH LOUGH

Site Code: LE207 Area (ha): 15.04 Grid Ref: 221233 301441 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

DRUMERKEANE

Solid Geology: Derryveeny Formation	Subsoil type: Water
Substrate type:	Substrate stability:
Mineral Soil	Firm

River catchment:

Shannon Upr

CORINE Habitats:

Land principally occupied by agriculture with areas of natural vegetation

Lake with fringing reed swamp and wet woodland located approximately 3km south of Carrigalin.

Site Description and Wetland Habitats Recorded

Mesotrophic lake surrounded by narrow fringe of Phragmites reed swamp. Wet woodland extends around much of the lake edge. At the eastern side of the lake, transitions occurs adjacent to agricultural grassland.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Areas of wet woodland within the site may correspond to the EU Annex I habitat 91E0 Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae, Salicion albae).

Main Fossitt habitats on site

FL4 Mesotrophic lakes

EU Habitats Directive habitats on site

91E0 *Alluvial forests with Alnus glutinosa and

FS1 Reed and large sedge swamps

FW4 Drainage ditches

WN6 Wet willow-alder-ash woodland

Fossitt habitats surrounding site

FW4 Drainage ditches

GA1 Improved agricultural grassland

GS4 Wet grassland

WD4 Conifer plantation

WL1 Hedgerows

WL2 Treelines

Landuse / Management Activity Frequency of use

Fishing 1 Rare (<5%)
Boating 1 Rare (<5%)

Impacting Activity (EU code and title)

Intensity Impact

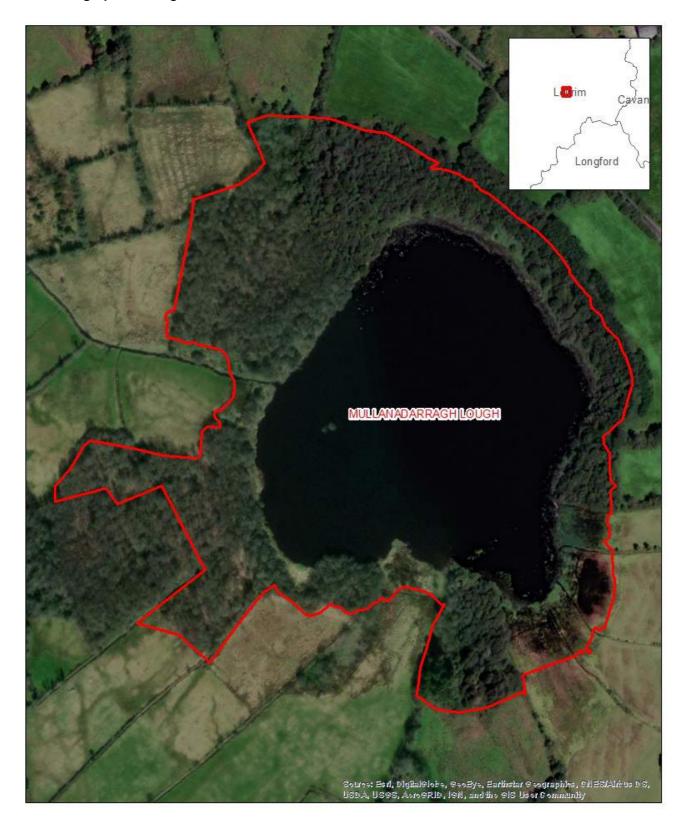
H01.05 diffuse pollution to surface waters due to agricultural and B = medium Unknown forestry activities

Threats

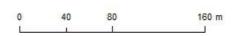
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

Flora on site - Latin & English species nar	me
Betula pubescens	Downy Birch
Calliergonella cuspidata	Pointed Spear Moss
Caltha palustris	Marsh-marigold
Carex nigra	Common Sedge
Carex sp.	Sedge
Cerastium fontanum	Common Mouse-ear
Comarum palustre	Marsh Cinquefoil
Elodea canadensis	Canadian Waterweed

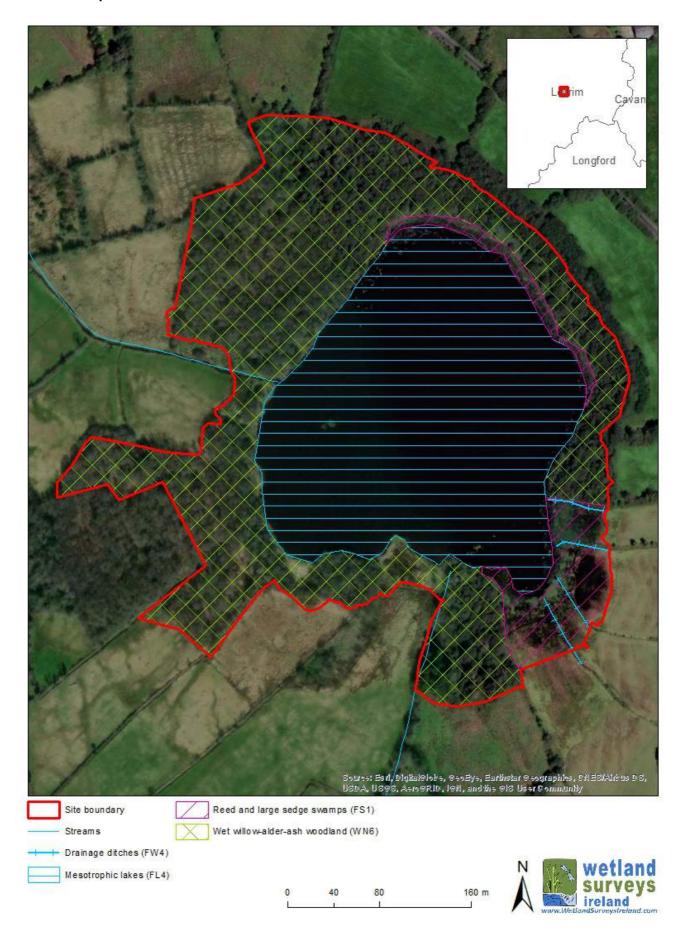
Zolami Wodana Fiola Garvey ZoZi	
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Galium palustre	Marsh-bedstraw
Iris pseudacorus	Yellow Iris
Juncus articulatus	Jointed Rush
Juncus effusus	Soft-rush
Lysimachia nemorum	Yellow Pimpernel
Nuphar lutea	Yellow Water-lily
Persicaria sp.	Bistort
Phalaris arundinacea	Reed Canary-grass
Phragmites australis	Common Reed
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Rumex acetosa	Common Sorrel
Salix cinerea subsp. cinerea	Grey Willow
Salix viminalis	Osier
Schoenoplectus lacustris	Common Club-rush
Typha latifolia	Bulrush
Viola palustris	Marsh Violet
Fauna on site - English and Latin species name	
7 spotted ladybird	Coccinella 7-punctata
Dragon and Damselflies various	
Mute Swan	Cygnus olor











Site Name: ROSSBEG TOOMAN BOG

Site Code: LE64 Area (ha): 191.39 Grid Ref: 211508 288433 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

14/09/2021

Survey Code:

LEWS2021

Site source information:

Additional ecotope survey recommended Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

A Rating: Internationally Important

Townland:

TOOMAN

Solid Geology:	Subsoil type:
Courceyan limestone	Cut
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Peat bogs

Intact raised bog ca 6.3km east of Roosky.

Site Description and Wetland Habitats Recorded

Large linear expanse of raised bog, largely remaining intact. The bog surface has a good cover of Sphagnum mosses and typical raised bog communities. In places pools have dried out suggesting drainage effects from marginal historic peat cutting. Cutover is now abandoned and regenerating with peatland vegetation and drier scrub where water table is low.

Target Notes - (see Habitat Map for location of Target Notes)

No. N1	Category Damage	Comment Dumping.
N2	General	Pools are not filled with water. Dry with muddy bottoms. Indicates that water table is not as high as it should be.

Management Recommendations following survey

Assess the restoration potential. Propose for designation as a nature conservation site. Eliminate roadside dumping of refuse.

Future Survey Recommendations

Ecotope survey recommended to assess the potential occurrence of active raised bog and to inform future restoration potential.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Annex 1 habitat Active Raised Bog (7140) is likely to be present in small areas towards centre of bog. Parts of the site may also correspond to the EU Annex 1 habitat Depressions on peat substrates of the Rhynchosporion (7150). The remainder of the site correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.

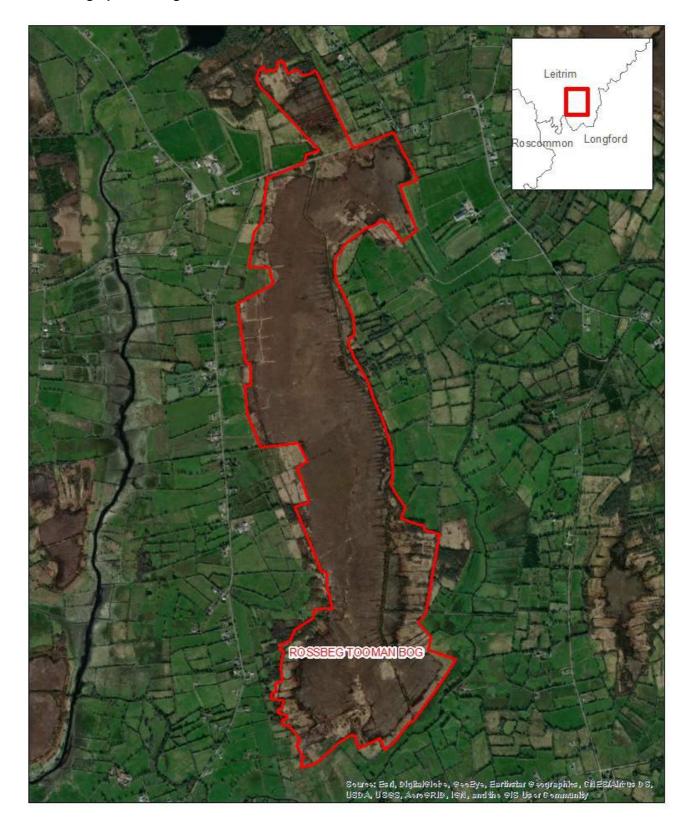
Main Fossitt habitats on site BL3 Buildings and artificial surfaces	EU Habitats Directive habitats on site 7110 *Active raised bogs
GS4 Wet grassland	7120 Degraded raised bogs still capable of natural
PB1 Raised bogs	7150 Depressions on peat substrates of the
PB4 Cutover bog	
WS1 Scrub	
Fossitt habitats surrounding site	
BL3 Buildings and artificial surfaces	
GA1 Improved agricultural grassland	
GS4 Wet grassland	
WL1 Hedgerows	
WL2 Treelines	
WS1 Scrub	

Landuse / Management Activity	Frequency of use	
None		
Impacting Activity (EU code and title) J02.05 Modification of hydrographic functioning, general	Intensity B = medium	Impact - 1 = reparable negative influence
J02.01 Landfill, land reclamation and drying out, general	A = high	- 2 = irreparable negative

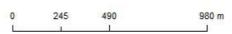
Threats

C01.03.02 mechanical removal of peat J02.05 Modification of hydrographic functioning, general

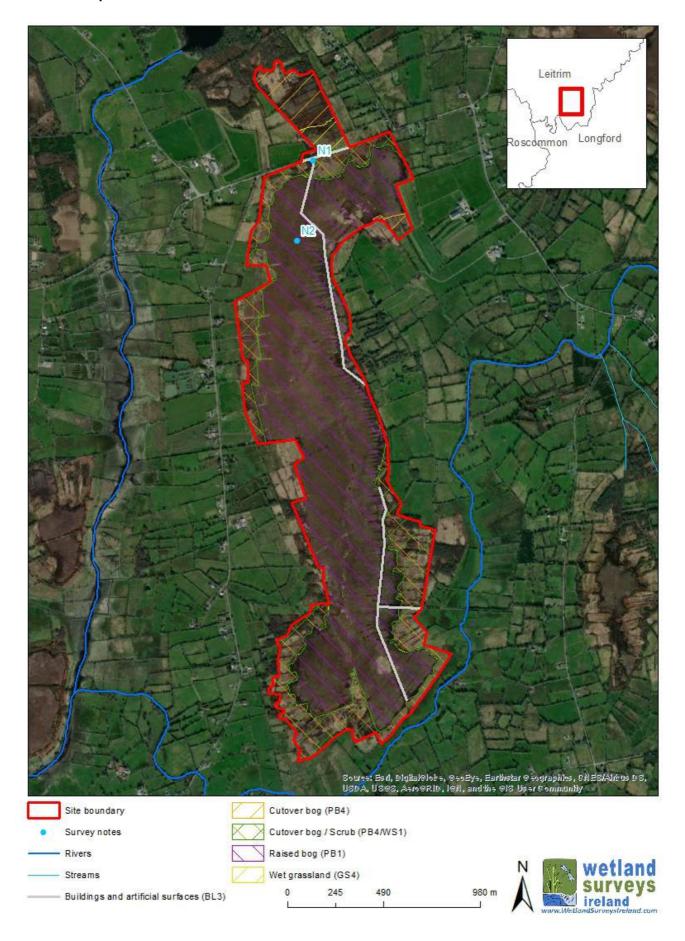
Flora on site - Latin & English species name	
Andromeda polifolia	Bog-rosemary
Betula pubescens	Downy Birch
Calluna vulgaris	Ling Heather
Calystegia sepium	Hedge Bindweed
Cladonia macilenta	Lichen
Cladonia portentosa	Branching Lichen
Cladonia uncialis	Antler Lichen
Drosera anglica	Great Sundew
Drosera intermedia	Oblong-leaved Sundew
Drosera rotundifolia	Round-leaved Sundew
Erica tetralix	Cross-leaved Heath
Eriophorum angustifolium	Common Cottongrass
Eriophorum vaginatum	Hare's-tail Cottongrass
Euphrasia sp.	Eyebright
Hypnum jutlandicum	Moss
Molinia caerulea	Purple Moor-grass
Myrica gale	Bog-myrtle
Narthecium ossifragum	Bog Asphodel
Pteridium aquilinum	Bracken
Rhynchospora alba	White Beak-sedge
Rubus fruticosus agg.	Blackberry
Salix cinerea subsp. cinerea	Grey Willow
Sphagnum capillifolium	Acute-leaved Bog Moss
Sphagnum cuspidatum	Feathery Bog Moss
Sphagnum papillosum	Papillose Bog Moss
Sphagnum subnitens	Lustrous Bog Moss
Sphagnum tenellum	Soft Bog Moss
Succisa pratensis	Devil's-bit Scabious
Trichophorum cespitosum	Deergrass
Trifolium pratense	Red Clover
Ulex europaeus	Gorse
auna on site - English and Latin species name	
Common Snipe	Gallinago gallinago
Fox Moth	Macrothylacia rubi
Irish Hare	Lepus timidus hibernicus
Speckled Wood	Pararge aegeria
Swallow	Hirundo rustica











Site Name: SHEEMORE WOOD AND LAKE - SHEEMORE WOOD pNHA

Site Code: LE155 Area (ha): 46.23 Grid Ref: 199443 304955 County: LE



Site designation(s):

pNHA

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

17/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

B Rating: Nationally Important

Townland:

SHEEMORE

Solid Geology:	Subsoil type:
Marine shelf facies	Cut
Substrate type:	Substrate stability:
Peat	Floating mat

River catchment:

Shannon Upr

CORINE Habitats:

Pastures

Lake occurring within a larger complex of wetland and dry land habitats located 6.5km east of Carrick-on-Shannon.

Site Description and Wetland Habitats Recorded

The wetland interest of the site includes a small mesotrophic lake with floating water lillies, a narrow fringe of reed swamp, and a small transition mire that shows signs of degradation due to drainage. The transition mire is dominated by Carex rostrata with abundant Menyanthes trifoliata, Equisetum fluviatile, and Comarum palustre.

Target Notes - (see Habitat Map for location of Target Notes)

No. Comment Category None NA NA

Management Recommendations following survey

Assess the potential to block drains on the site and incentivise reduction of nutrient inputs from adjacent silage field.

Future Survey Recommendations

None

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Transition mire that shows signs of degradation due to drainage, relatively dry and firm underfoot. Some of the areas of transition mire within the site may correspond to the EU Annex I habitat 7140 Transition Mires and Quaking Bogs.

Main Fossitt habitats on site

EU Habitats Directive habitats on site FL4 Mesotrophic lakes 7140 Transition mires and quaking bogs

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

PF3 Transition mire & quaking bog

WN2 Oak-ash-hazel woodland

WS1 Scrub

Fossitt habitats surrounding site

Landuse / Management Activity

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

Frequency of use

Grazing - cattle 2 Occasional (5-20%)

Impacting Activity (EU code and title)

Intensity **Impact** H01.05 diffuse pollution to surface waters due to agricultural and C = low Unknown

forestry activities

J02.05 Modification of hydrographic functioning, general - 1 = reparable negative influence B = medium

Threats

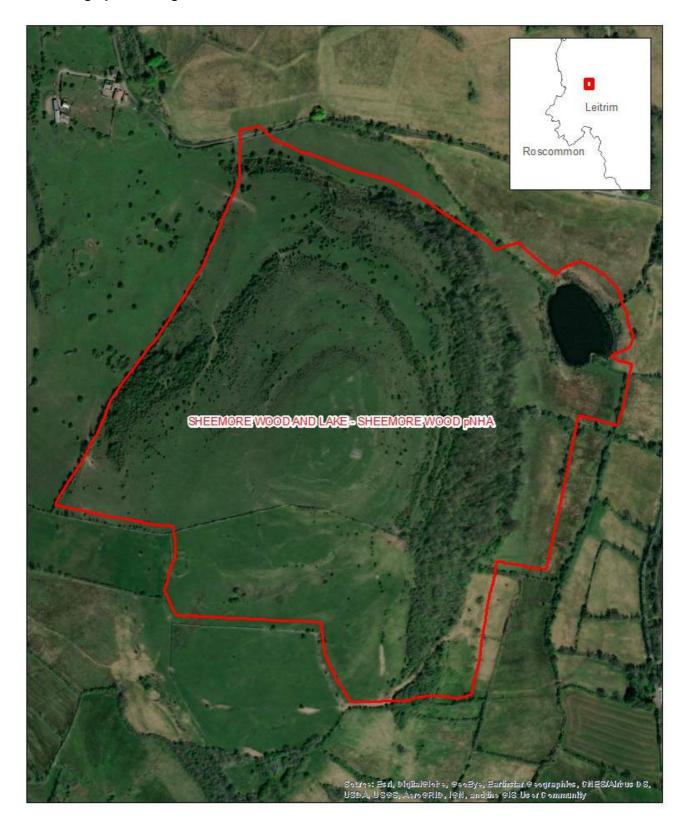
H01.05 diffuse pollution to surface waters due to agricultural and forestry activities

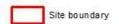
J02.05 Modification of hydrographic functioning, general

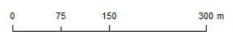
Flora on site - Latin & English species name

Agrostis stolonifera	Creeping Bent
Angelica sylvestris	Wild Angelica
Anthoxanthum odoratum	Sweet Vernal-grass

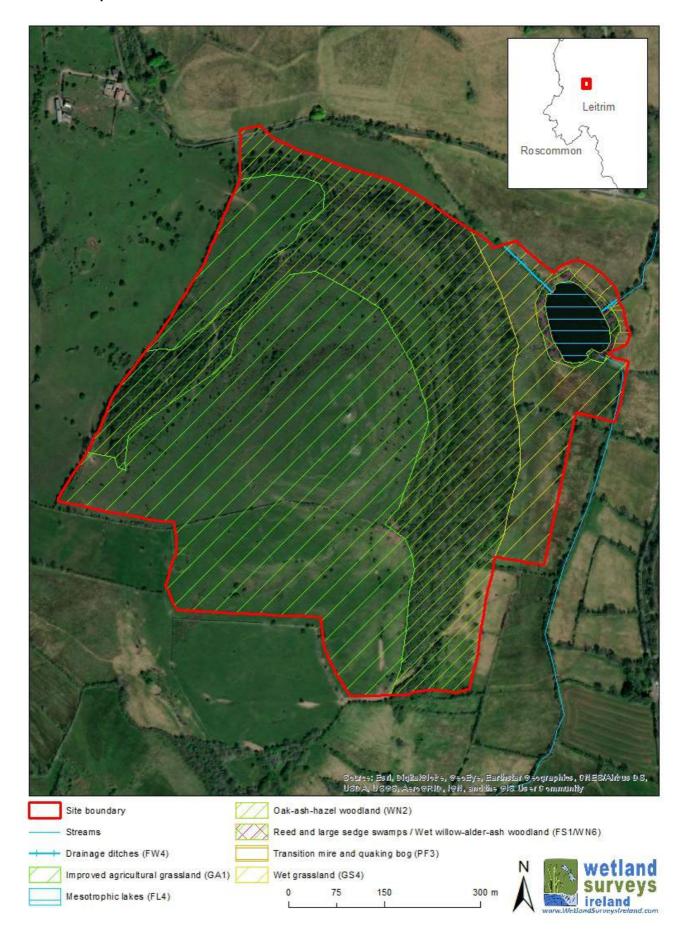
Calliergonella cuspidata	Pointed Spear Moss
Caltha palustris	Marsh-marigold
Carex rostrata	Bottle Sedge
Cicuta virosa	Cowbane
Comarum palustre	Marsh Cinquefoil
Crataegus monogyna	Hawthorn
Equisetum fluviatile	Water Horsetail
Filipendula ulmaria	Meadowsweet
Holcus lanatus	Yorkshire-fog
Juncus articulatus	Jointed Rush
Juncus effusus	Soft-rush
Lychnis flos-cuculi	Ragged-Robin
Lythrum salicaria	Purple-loosestrife
Mentha aquatica	Water Mint
Menyanthes trifoliata	Bogbean
Nuphar lutea	Yellow Water-lily
Phalaris arundinacea	Reed Canary-grass
Ranunculus acris	Meadow Buttercup
Ranunculus flammula	Lesser Spearwort
Ranunculus repens	Creeping Buttercup
Salix cinerea subsp. cinerea	Grey Willow
Schoenoplectus lacustris	Common Club-rush
Succisa pratensis	Devil's-bit Scabious
Typha latifolia	Bulrush
Vicia cracca	Tufted Vetch
Viola palustris	Marsh Violet
Fauna on site - English and Latin species name	
Coarse fish various	NA
Small White	Pieris rapae
Swallow	Hirundo rustica











Site Name: SUNNAGH MORE EAST BOG

Site Code: LE118 Area (ha): 48.11 Grid Ref: 217068 297858 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

15/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

SUNNAGH MORE

Solid Geology: Derryveeny Formation	Subsoil type: Cut
Substrate type:	Substrate stability:
Peat	Soft Ground

River catchment:

Shannon Upr

CORINE Habitats:

Peat bogs

Degraded raised bog located 8km to the south-west of Carrigallen.

Site Description and Wetland Habitats Recorded

Extensive raised bog much of which has been subject to past cutting and drainage. The open bog supports abundant heather with Molinia and Myrica gale common. Birch has become established alongside historic drains. The cutover is regenerating with a mix of dry and wet bog communities.

Target Notes - (see Habitat Map for location of Target Notes)

No.	Category	Comment
N1	Damage	Area of recolonising bare ground used for dumping.
N2	Damage	Deep drain running through site. Not possible to cross. Birch growing along sides of drain.

Management Recommendations following survey

Assess potential for hydological restoration potential.

Future Survey Recommendations

Assess potential restoration possibilites on the bog by carrying out detailed ecohydrological studies.

Landowner Information Comments

None

Description of potential EU Habitats Directive Annex 1 habitats

Parts of the site may also correspond to the EU Annex 1 habitat 7120 Degraded raised bogs still capable of natural regeneration.

Main Fossitt habitats on site FW4 Drainage ditches	EU Habitats Directive habitats on site
GS4 Wet grassland	7120 Degraded raised bogs still capable of natural
PB1 Raised bogs	
PB4 Cutover bog	
WL2 Treelines	
WN7 Bog woodland	
WS1 Scrub	
Fossitt habitats surrounding site	
BL3 Buildings and artificial surfaces	
FW4 Drainage ditches	
GA1 Improved agricultural grassland	
GS4 Wet grassland	
WL1 Hedgerows	

Landuse / Management Activity	Frequency of us	e
Infill	1 Rare (<5%)	
Impacting Activity (EU code and title)	Intensity	Impact
J02.01.03 infilling of ditches, dykes, ponds, pools, mars	shes or pits C = low	- 2 = irreparable negative
J02.06 Water abstractions from surface waters	A = high	- 2 = irreparable negative

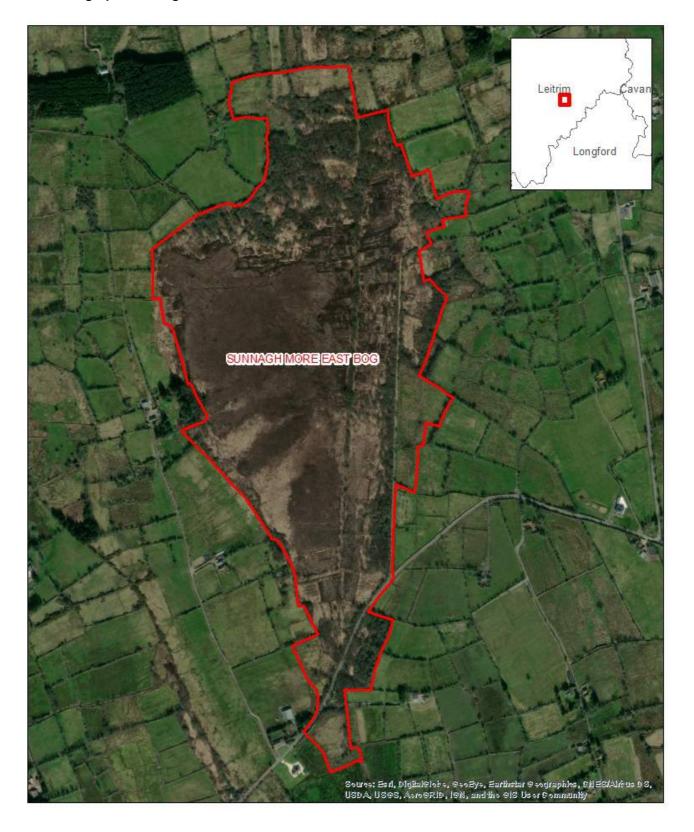
Threats

WS1 Scrub

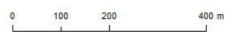
C01.03.02 mechanical removal of peat
J02.01 Landfill, land reclamation and drying out, general

J02.05 Modification of hydrographic functioning, general

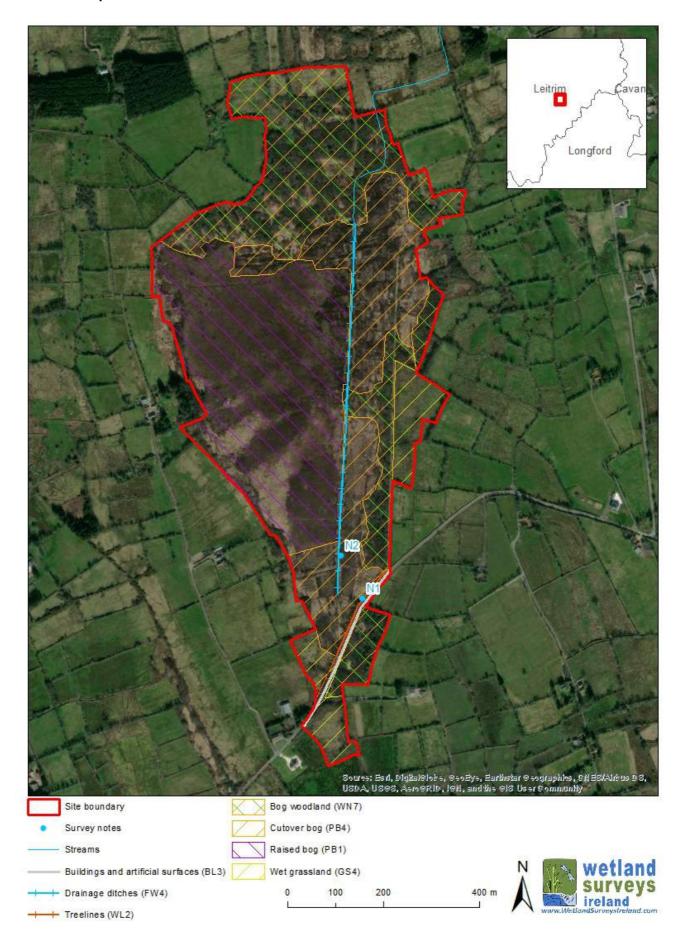
Flora on site - Latin & English species name	
Betula pubescens	Downy Birch
Calluna vulgaris	Ling Heather
Carex panicea	Carnation Sedge
Cladonia portentosa	Branching Lichen
Drosera rotundifolia	Round-leaved Sundew
Equisetum fluviatile	Water Horsetail
Erica tetralix	Cross-leaved Heath
Eriophorum angustifolium	Common Cottongrass
Eriophorum vaginatum	Hare's-tail Cottongrass
Hypnum jutlandicum	Moss
Juncus acutiflorus	Sharp-flowered Rush
Molinia caerulea	Purple Moor-grass
Myrica gale	Bog-myrtle
Narthecium ossifragum	Bog Asphodel
Polytrichum commune	Common Haircap Moss
Potentilla erecta	Tormentil
Sphagnum capillifolium	Acute-leaved Bog Moss
Sphagnum denticulatum	Cow-horn Bog Moss
Sphagnum denticulatum	Cow-horn Bog Moss
Sphagnum magellanicum	Magellan's Bog Moss
Sphagnum palustre	Blunt-leaved Bog Moss
Sphagnum papillosum	Papillose Bog Moss
Sphagnum subnitens	Lustrous Bog Moss
Sphagnum tenellum	Soft Bog Moss
Trichophorum cespitosum	Deergrass
Fauna on site - English and Latin species name	
Swallow	Hirundo rustica
Wren	Troglodytes troglodytes











Site Name: WILLOWFIELD LOUGH

Site Code: LE299 Area (ha): 7.47 Grid Ref: 213851 310922 County: LE



Site designation(s):

Undesignated site

Surveyed by:

Mary Catherine Gallagher & Patrick Crushell

Date of wetland survey:

16/09/2021

Survey Code:

LEWS2021

Site source information:

Detailed Wetland Survey undertaken Site previously mapped in GIS dataset Site previously reported from literature

Wetland Present on the Site

YES

Conservation ranking after survey:

C+ Rating: County Conservation value

Townland:

CANNABOE

Solid Geology:	Subsoil type:
Marine shelf facies	Cut
Substrate type: Peat	Substrate stability: Floating mat

River catchment:

Erne

CORINE Habitats:

Pastures

Small lake that is largely terrestrialised located ca 1km southeast of Ballinamore.

Site Description and Wetland Habitats Recorded

Small terrestrialising lake with open water dominated by floating macrophytes. The lake is surrounded by reed swamp dominated by common reed (Phragmites australis) and greater tussock sedge (Carex paniculata). Accessible through right of way at southern extent of site, local resident suggested that the lake was formerly used for coarse fishing.

Target Notes - (see Habitat Map for location of Target Notes)

No. Category Comment

Management Recommendations following survey

None

Future Survey Recommendations

None

Landowner Information Comments

Met local resident who mentioned that site has terrestrialised significantly in recent years and was formerly used for coarse fishing.

Description of potential EU Habitats Directive Annex 1 habitats

It is not thought that any of the habitats present within this site correspond to a habitat listed under Annex I of the EU Habitats Directive.

Main Fossitt habitats on site

FL4 Mesotrophic lakes

FS1 Reed and large sedge swamps

FW4 Drainage ditches

GS4 Wet grassland

Fossitt habitats surrounding site

BL3 Buildings and artificial surfaces

GA1 Improved agricultural grassland

GS4 Wet grassland

WL1 Hedgerows

WS1 Scrub

WS2 Immature woodland

EU Habitats Directive habitats on site

None noted

Frequency of use

Landuse / Management Activity

Grazing - cattle 2 Occasional (5-20%)

Fishing 1 Rare (<5%)

Impacting Activity (EU code and title)

Intensity **Impact** B02 Forest and Plantation management & use B = medium Unknown

H01.05 diffuse pollution to surface waters due to agricultural and C = low Unknown

forestry activities

Threats

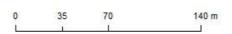
B02 Forest and Plantation management & use

Flora on site - Latin & English species name				
Agrostis stolonifera	Creeping Bent			
Angelica sylvestris	Wild Angelica			
Betula pubescens	Downy Birch			
Caltha palustris	Marsh-marigold			

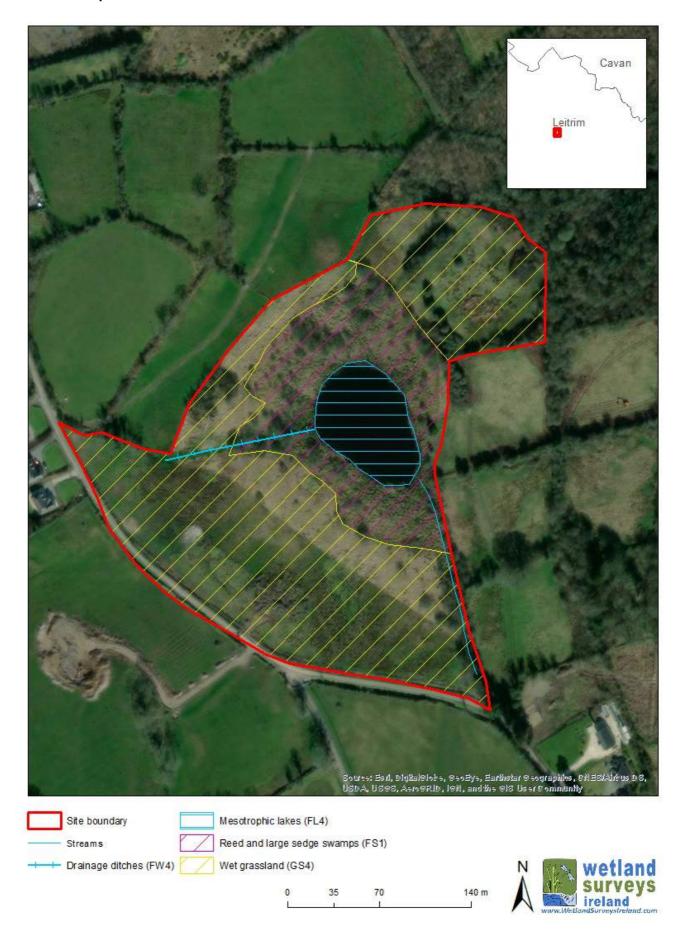
Cardamine pratensis	Cuckooflower			
Carex paniculata	Greater Tussock-sedge			
Carex rostrata	Bottle Sedge			
Equisetum fluviatile	Water Horsetail			
Filipendula ulmaria	Meadowsweet			
Holcus lanatus	Yorkshire-fog			
Juncus effusus	Soft-rush			
Menyanthes trifoliata	Bogbean			
Nuphar lutea	Yellow Water-lily			
Phalaris arundinacea	Reed Canary-grass			
Potamogeton spp.	Pondweed			
Salix cinerea subsp. cinerea	Grey Willow			
Typha latifolia	Bulrush			
Fauna on site - English and Latin species name				
Coarse fish various	NA			
Common Frog	Rana temporaria			











County Leitrim Wetlands Field Survey 2021

Data Deliverables Contents

by Patrick Crushell, Mary Catherine Gallagher & Peter Foss

Contents:

- 1. **County Leitrim Wetlands Field Survey 2021.** Main survey report and individual site reports prepared by Patrick Crushell, Mary Catherine Gallagher & Peter Foss (In PDF format, requires Adobe Acrobat to view).
- 2. Leitrim Wetland Site Database 2021 Version 2.0; Leitrim Wetland Survey Database 2021 Version 1.0 (requires Filemaker Pro to view).
- 3. Excel tables to accompany the County Leitrim Wetlands Field Survey 2021 report

LEWS_Survey_Database_Site_Summary: Summary information on sites survey during the LEWS 2021, including site location, and table with site description and conservation ranking.

- 4. GIS Shape files from the County Leitrim Wetlands Field Survey 2021.
 - a. ArcView GIS dataset (Requires ArcView GIS Software)
 - b. MapInfo GIS dataset (Requires MapInfo GIS Software)

The project is an action of the County Leitrim Heritage Plan 2020-2025 funded under the National Biodiversity Action Plan Fund 2021