

Monaghan Fen Survey II

Volume II: Site Survey Reports Part 3 of 3

Report for Monaghan County Council & The National Parks and
Wildlife Service, Department of the Environment, Heritage and
Local Government, Ireland

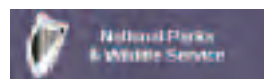


Prepared on behalf of Wetland Surveys by:
Dr Peter Foss & Patrick Crushell

October 2008



An Action of the Monaghan Heritage Plan
2006-2010



National Fen Survey of Ireland Database - Site Synopsis

Site Name: LOUGH APHUCA

Site Code: MFS-30

Current Conservaton Designations: Undesignated site

National Grid Reference: H 831 059

County: MO

Total Site Area (ha): 6.8

Discovery Grid Ref: 283100 305900

Vice County: H32

6" map No.

Discovery map No. 35

Air photograph No. 1696B

NFS Overall Site Results Section

NFS Brief site description

A small inter-drumlin reed fringed lake with an extensive area of marsh vegetation to the South and West. An area of wet woodland occurs to the south-east and north of the lake.

There is no fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input checked="" type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The site is deemed to be of moderate ecological value.

Fen Survey Conservation Recommendations based on NFS

No further infilling of the site should be permitted.

NFS Date of Survey:

14 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Main Habitats on Site: LAKE, REEDBED, WET WOODLAND & MARSH

Fossitt habitat types present within site based on NFS:

- BL2 Earth banks
- FL Lakes & Ponds
- FL4 Mesotrophic lakes
- GM1 Marsh
- WL1 Hedgerows
- WN6 Wet willow-alder-ash woodland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
- ☐ Alkaline fen 7230/PF1
- ☐ Poor fen/PF2
- ☐ Transition Mire 7140/PF3
- ☐ Petrifying Spring 7220/FP1
- ☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
- Alkaline fen 7230
- Poor fens
- Transition Mire 7140
- * Petrifying Springs 7220
- Non Calcareous Springs

Total Fen Area
(sum of all fen areas)

General NFS Results Section

Townland Names:

DRUMBROAGH; CLOGHVALLY LOWER; NAFARTY

River Catchment:

River Rossdreenagh; River Proules; River Glyde

Solid geology:

Dinantian pure bedded limestone

Topography:

Inter drumlin hollow site with lake

Quaternary deposits:

Cutover raised bog

Hyrdology:

Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:

Substrate stability:

Altitude Range (m):

51

Range Peat depth (cm):

Range Water depth (cm):

Water sample number:

NA

Field pH range:

Field Conductivity range:

Photographic numbers:

DSC 2003-2021 P.Foss (6 images)

NFS Site landuse, impacts, activities and threats

NFS Landuse Within site boundary

Activity

Grazing - cattle

Legal dumping

Scale

2 Occasional (5-20%)

1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Grazing - cattle

Meadow - silage

Roads

Residential (scattered)

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|--|-----------|------------------------------------|
| 810 Drainage | C = low | Unknown |
| 800 Landfill, land reclamation and drying out, general | C = low | - 1 = reparable negative influence |

NFS Site Threats

| Activity | Note Number(s) |
|--|----------------|
| 120 Fertilisation | N/A |
| 800 Landfill, land reclamation and drying out, general | N1 |
| 810 Drainage | N2 |

NFS Site Description; Notes and Ground Photograph Captions**NFS Site Synopsis with Fen interest description**

Lough Aphuca is located 2 km north of Carrickmacross just west of the R180 road to Ballybay.

The open marsh area surrounding the lake has a good suite of marsh species with Common Reed (*Phragmites australis*), Reed Canary-grass (*Phalaris arundinacea*), Lesser Pond Sedge (*Carex acutiformis*) and Brown Sedge (*Carex disticha*) dominating the tall herb layer.

Adjacent to a large drainage ditch to the south-west is an area of wet woodland dominated by Grey Willow (*Salix cinerea*) and Alder (*Alnus glutinosa*). Floating macrophytes including Yellow Water-lily (*Nuphar lutea*) occur throughout much of the lake and a narrow emergent reed zone around its margin. A discrete stand of Saw Sedge (*Cladium mariscus*) occurs at the western edge of the lake, elsewhere the reed fringe contains Common Club-rush (*Schoenoplectus lacustris*) and Bulrush (*Typha latifolia*).

There are a number of major well maintained drainage ditches traversing the marsh habitat to the South of the lake. Improved agricultural grassland surrounds the site and a main road runs adjacent to the North-eastern side of the site.

No fen habitats were recorded at the site.

NFS Site Notes

N1 Damage: Area infilled with soil and building rubble.

N2 Damage: Drain running through the marsh area at the site, into the lake.

N3 Habitat: Marsh community with commonly occurring *Phragmites australis*, *Phalaris arundinacea*, *Carex acutiformis*, *Carex disticha*, *Filipendula ulmaria*, *Valeriana officinalis*, *Vicia cracca*, *Lathyrus montanus* together with occasional *Juncus effusus*, *Deschampsia caespitosa*, *Stellaria graminea*, *Potentilla palustris*, *Carex nigra*, *Calliergonella cuspidata*, *Rumex acetosa*, *Agrostis canina*, *Urtica dioica*.

N4 Habitat: Wet willow and alder woodland

N5 Habitat: *Typha latifolia* dominated reed swamp area around the shore of the lake. There are one or two small patches of *Cladium mariscus* reed swamp on the lakeshore in the NE corber of the lake.

N6 Habitat: *Phalaris arundinacea* dominated reed swamp area.

N7 Habitat: *Juncus effusus* dominated wet grassland area.

NFS Species recorded on site

MFS 2008 Fauna records -Tortoiseshell (1); Four spotted chaser; Site rich in dragonfly species.

NFS Ground Photographic Notes

DSC 2003: P1 - View over Lough Aphuca (southern half) with recent infill area in foreground and the marsh and wet woodland area in the distance. View to north-west.

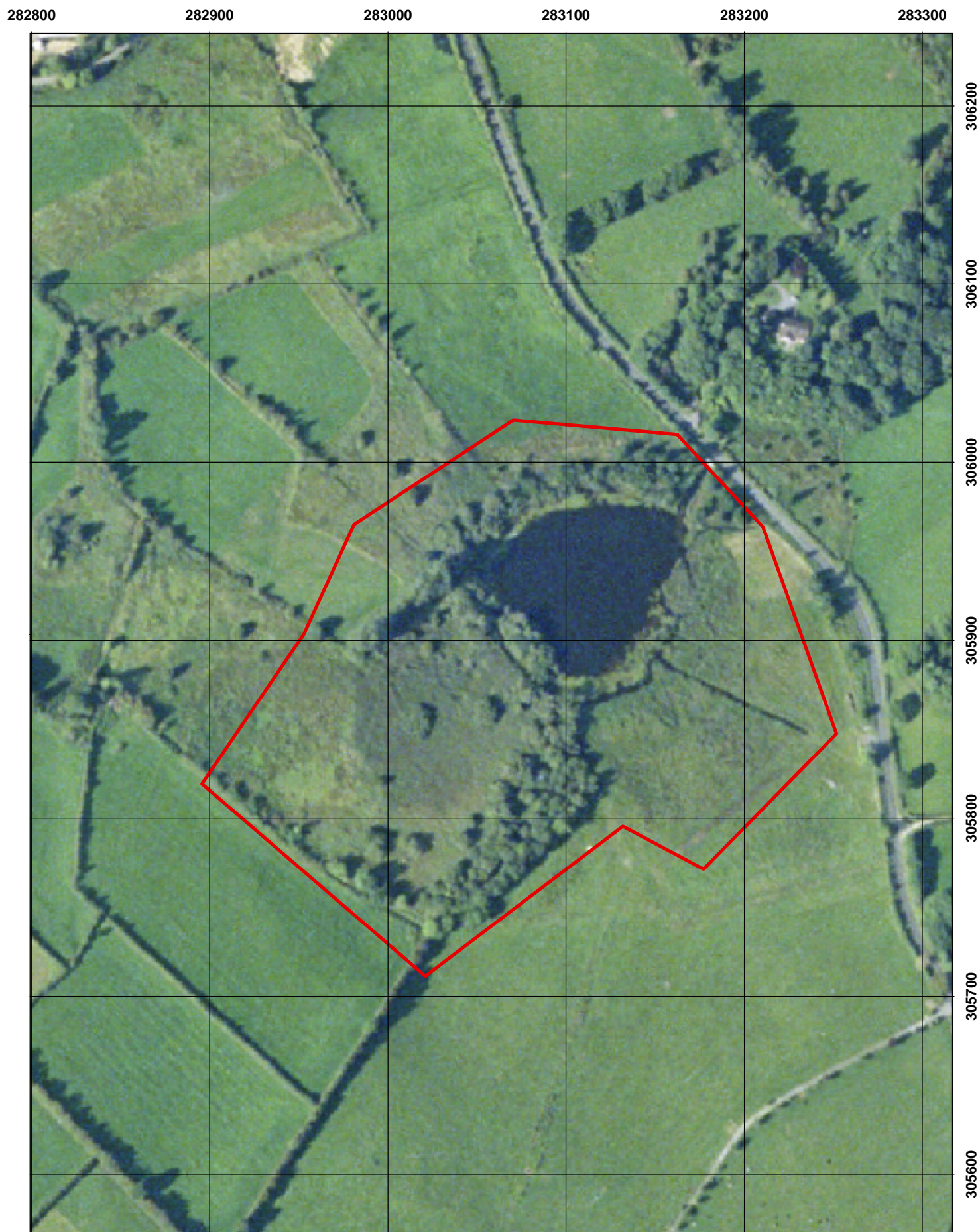
DSC 2005: P2 - View over Lough Aphuca (northern half) with recent infill area in foreground and the marsh and wet woodland area in the distance. View to north.

DSC 2006: P2 - View over Lough Aphuca (northern half) with recent infill area in foreground, wet grassland beyond, and the marsh and wet woodland area in the distance. View to north.

DSC 2010: P3 - Marsh area at the site dominated by *Carex acutiformis* and *Carex disticha* and wet woodland area in the distance. View to north-west.

DSC 2020: P4 - View over Lough Aphuca (northern corner) with *Typha latifolia* reed beds around lakeshore. View to south.

DSC 2021: P4 - View over Lough Aphuca (northern corner) with *Typha latifolia* reed beds around lakeshore. View to south-west.

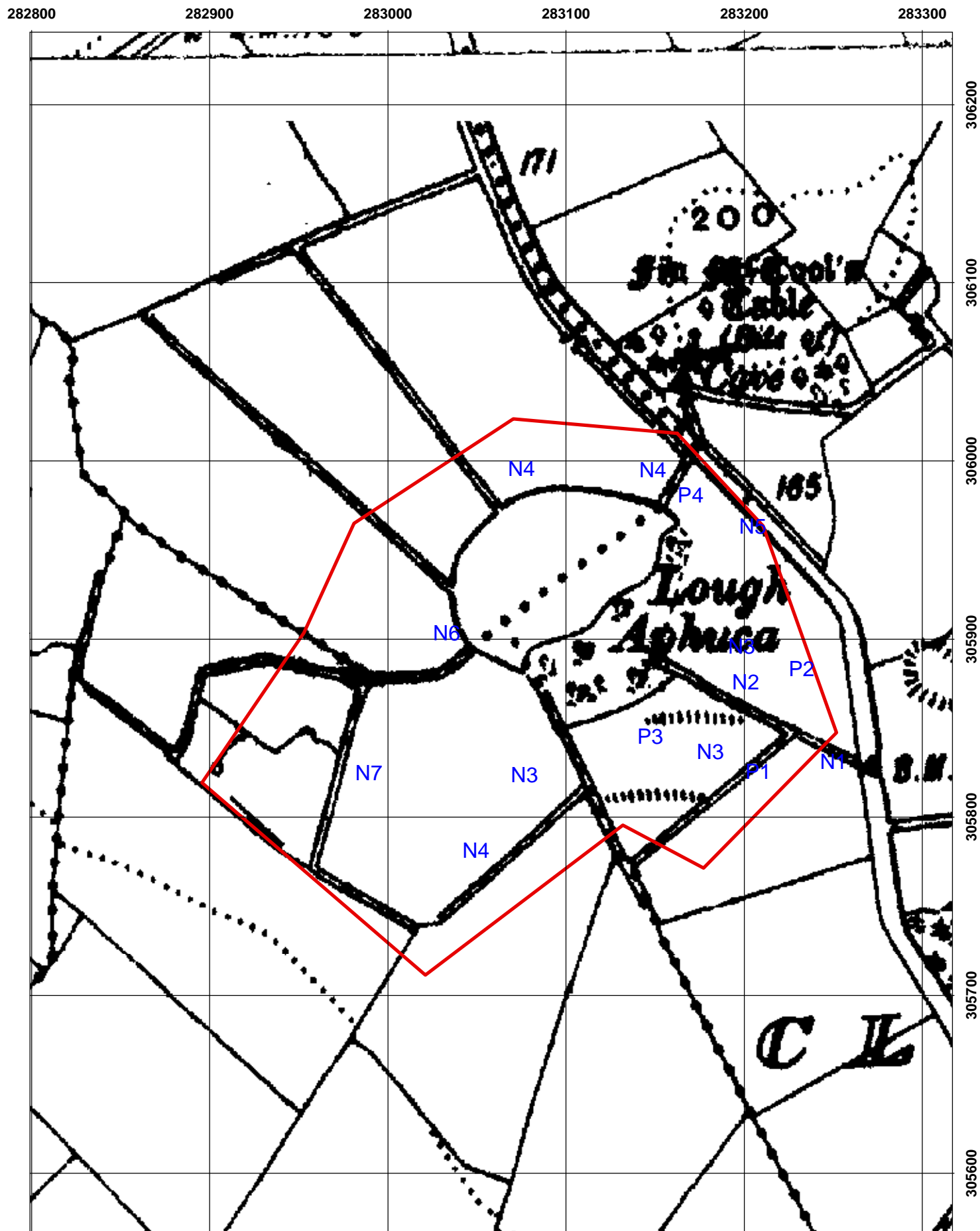


Site Boundary

MFS-30 Lough Apuoca

0 25 50 100 150 Meters





Site Boundary

MFS-30 Lough Aphuca

0 25 50 100 150 Meters

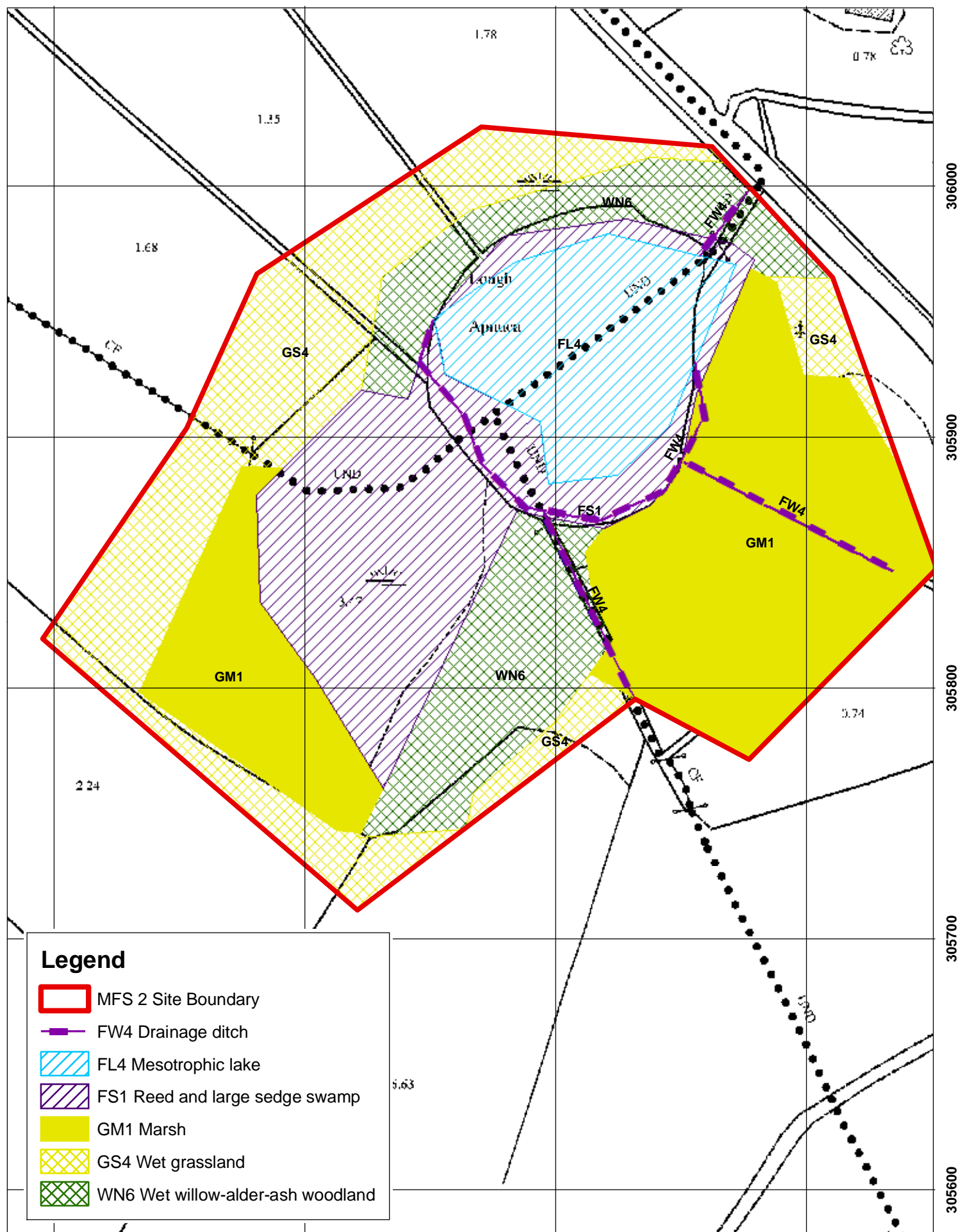


282900

283000

283100

283200



MFS-30 Lough Aphuca

0 25 50 100 150 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: LOUGH NAHINCH

Site Code: MFS-40

Current Conservaton Designations: Undesignated site

National Grid Reference: H 784 265

County: MO

Total Site Area (ha): 65.8

Discovery Grid Ref: 278406 326571

Vice County: H32

6" map No.

Discovery map No. 28B

Air photograph No. 1220A; 1220B;

NFS Overall Site Results Section

NFS Brief site description

This large site contains a complex of habitats including three lakes, extensive area of poor fen, regenerating bog, scrub, wet woodland and mixed broadleaf woodland.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input checked="" type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

This large site is of ecological interest due to the diversity of habitats present accompanied by the undisturbed nature of the site. An extensive area of poor fen is of considerable interest. The site is deemed to be of high ecological value.

Fen Survey Conservation Recommendations based on NFS

No further infilling of the site should be allowed.

NFS Date of Survey:

17 & 21 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Releve data collected

Water chemistry samples collected

New NHA site card created

Main Habitats on Site: POOR FEN, SCRUB, LAKE, CUTOVER BOG

Fossitt habitat types present within site based on NFS:

BL3 Buildings and artificial surfaces
 ED2 Spoil and bare ground
 ED3 Recolonising bare ground
 FL8 Other artificial lakes and ponds
 FS1 Reed and large sedge swamps
 FW4 Drainage ditches
 GA1 Improved agricultural grassland
 GS4 Wet grassland
 HD1 Dense bracken
 HH1 Dry siliceous heath
 PB4 Cutover bog
 WL1 Hedgerows
 WN6 Wet willow-alder-ash woodland
 WS1 Scrub
 FL1 Dystrophic lakes
 PF2 Poor fen and flush
 WD1 (Mixed) broadleaved woodland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
☐ Alkaline fen 7230/PF1
☒ Poor fen/PF2
☐ Transition Mire 7140/PF3
☐ Petrifying Spring 7220/FP1
☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
 Alkaline fen 7230
 Poor fens 1.68
 Transition Mire 7140
 * Petrifying Springs 7220
 Non Calcareous Springs

Total Fen Area
(sum of all fen areas)

1.68

General NFS Results Section**Townland Names:**

TASSAN; CASHEL; TONAGH (Cremome By)

River Catchment:

Lough Muckno; River Fane & Clontibert Stream; River Blackwater

Solid geology:

Silurian metasediments and volcanics

Topography:

Large cutover area with 2 lakes and scrub covered rocky knolls

Quaternary deposits:

Cutover raised bog; Rock; Till Derived From Palaeozoic Sandstones

Hyrdology:

Outflow from the area is via a stream to the south west from the smaller of the two lakes in the center of the site.

Corine Landcover:412 Peatbogs
231 Pastures**Releve numbers:**

MFS 40 - R1 & R2

Substrate type:

Peat

Substrate stability:

Firm

Altitude Range (m):

150

Range Peat depth (cm):

200 +

Range Water depth (cm):

0 to -5

Water sample number:

MFS 40 - W1 & W2

Field pH range:

na

Field Conductivity range:

R1 - 262; R2 - 150

Photographic numbers:

DSC 2254-2564 P.Foss (12 images)

NFS Site landuse, impacts, activities and threats

NFS Landuse Within site boundary

Activity

Meadow - silage

Grazing - cattle

Legal dumping

Scale

1 Rare (<5%)

1 Rare (<5%)

1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Meadow - silage

Grazing - cattle

Residential (scattered)

Roads

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

Activity

Intensity

Influence

803 infilling of ditches, dykes, ponds, pools, marshes or

C = low

- 2 = irreparable negative influence

NFS Site Threats

Activity

Note Number(s)

803 infilling of ditches, dykes, ponds, pools, marshes or pits

N1

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Lough Nahinch is located 6.5 km north west of Castleblaney, on the N2 road to Monaghan town, and some 2 km due north of the Annayalla crossroads. The site can be accessed from the third class road to the north of the site, or a laneway to the south.

The bog, scrub and wet woodland communities occur on an area of cutover bog / heath upslope of the lakes. The scrub / woodland have developed on raised mineral ridges while bog communities are regenerating in the intervening depressions. Much of the scrub is dominated by a Gorse (*Ulex europaeus*) thicket, making access into much of the site difficult.

The regenerating bog areas have extensive interlocking hollows and pools with intervening hummocks. A full compliment of typical bog flora occurs in these discrete areas with some poor fen species also represented.

The main area of fen comprises an extensive quaking scragh of poor fen adjacent to the most southern of the three lakes.

The vegetation here is dominated by *Sphagnum fallax* in the complete ground layer with Bottle Sedge (*Carex rostrata*), Marsh Cinquefoil (*Potentilla palustris*) abundant in the herb layer.

Some infilling and dumping occurs adjacent to the road transecting the northern art of the site but elsewhere there is no evidence of recent damaging activities and little land-use activities.

This large site is of ecological interest due to the diversity of habitats present accompanied by the undisturbed nature of the site. An extensive area of poor fen is of considerable interest.

NFS Site Notes

N1 Damage: Infill area where soil and rock spoil has been dumped into the site.

N2 Habitat: Improved area of grassland.

N3 Habitat: Wet grassland area with *Juncus effusus*.

N4 Habitat: Mixed planted woodland area with *Fagus sylvatica*, *Betula pubescens*, and *Quercus* spp.

N5 Habitat: Gorse scrub mosaic area with *Ulex europaeus*, *Salix cinerea*, *Rubus fruticosus* agg., *Calluna vulgaris*, *Erica cinerea*, *Betula pubescens*, *Urtica dioica*, *Cirsium arvense*, *Pteridium aquilinum*, *Arrhenatherum elatius*, *Cytisus scoparius* (Broom), *Convolvulus arvensis*.

The gorse scrub areas give way in parts to heathland area dominated more by Ling and Bell heather, while in other parts *Pteridium aquilinum* (Bracken) may become the dominant species.

In other areas the Gorse community is replaced by Willow and Birch scrub or more mature woodland areas. The more mature woodland areas have a rich lichen flora and fungal growth especially on standing dead birch wood.

N6 Habitat: Poor fen communities, both in large cut-out bog depressions or infilling pools and forming larger scale quaking mats around the shore of the southern lake at the site.

See relevé number MFS2-40 R1 & R2 for species details. Relevé location: 278254 326589 & 278360 326650 respectively.

Main species present include *Carex rostrata*, *Carex curta*, *Eriophorum angustifolium*, *Sphagnum fallax*, *Aulacomnium palustre*, *Calliergon stramineum*, *Potentilla palustris*, *Hydrocotyle vulgaris*, *Eleocharis multicaulis*, *Carex echinata*, *C. panicea*, *Carex viridula* ssp. *oedocarpa*, *Equisetum fluviatile*, *Scorpidium scorpioides*, *Calliergon giganteum*, *Ranunculus flammula*, *Sparganium minimum*, *Drepanocladus revolvens*, *Menyanthes trifoliata*.

N7 Habitat: Remnant cutover bog areas with drier Ling heather dominated peat hags and intervening wet pool areas. Peat depth in hollows 70 cm plus.

Species in the open bog depressions include: *Sphagnum palustre*, *Potentilla erecta*, *Calluna vulgaris*, *Potentilla palustris*, *Polytrichum commune*, *Erica tetralix*, *Carex rostrata*, *Equisetum fluviatile*, *Vaccinium myrtillus*, *Eriophorum angustifolium*, *Hypnum jutlandicum*, *Sphagnum fimbriatum*, *Agrostis stolonifera*, *Holcus lanatus*, *Luzula multiflora*, *Sphagnum capillifolium*, *Blechnum spicant*, *Succisa pratensis*, *Betula pubescens*, *Salix cinerea*, *Molinia caerulea*, *Drosera rotundifolia*, *Cladonia portentosa*.

Where there is open surface water pools contain *Potamogeton polygonifolius*, *Carex rostra*, *Menyanthes*, *Narthecium*, *Sphagnum palustre*, *Drosera rotundifolia*, *Eriophorum angustifolium*, *Sphagnum subnitens*, *S. auriculatum*, *S. recurvum*, *Menyanthes trifoliata*, *Carex nigra*, *Eleocharis multicaulis*, *Juncus bulbosus*. These cutover bog pool areas were extremely rich in dragon and damselflies.

A mosaic of community type N5 / N6 / N7 cover the majority of this large site.

N8 Habitat: Lake shore reed swamp fringe which grades almost immediately into the poor fen areas extending inland from lakeshore. Species emergent in lakes include *Nymphaea alba*, *Alisma plantago aquatica*, *Nuphar lutea*, *Sparganium minimum*, *Equisetum fluviatile*, *Oenanthe aquatica*, *Typha latifolia*.

NFS Species recorded on site

MFS 2008 Fauna records - Ringlet (4); Frog (10+); Newt; Brown Hawker (3); S part of site around lakes and pool in cutover extremely rich in Dragon and damselflies.

NFS Ground Photographic Notes

DSC 2254: P1 - View over Lough Nahinch from a recently infilled and revegetated spoil heap (dominated by *Urtica dioica*), with lake area surrounded by dense Gorse scrub. View to west.

DSC 2256: P2 - Recently infilled area of site which has not yet re-vegetation. View to south over the site with willow, birch and gorse scrub in the distance.

DSC 2257: P3 - Cutover bog community in hollow, with Ling Heather present. Gorse and Bracken scrub surround the depressions.

DSC 2507: P4 - Wet grassland area at the western end of the area. The willow woodland on the site can be seen in the distance.

DSC 2508: P5 - Area of cutover bog dominated by Ling Heather heathland and surrounding Gorse and Birch scrub near the western edge of the site. View to south-east.

DSC 2509: P5 - Area of cutover bog dominated by Ling Heather heathland and regenerating bog and poor fen communities in the hollows. View to south-east.

DSC 2522: P5 - Area of regenerating cutover bog vegetation in a wet hollow with Bog Asphodel (*Narthecium ossifragum*) and Bog Cotton (*Eriophorum angustifolium*).

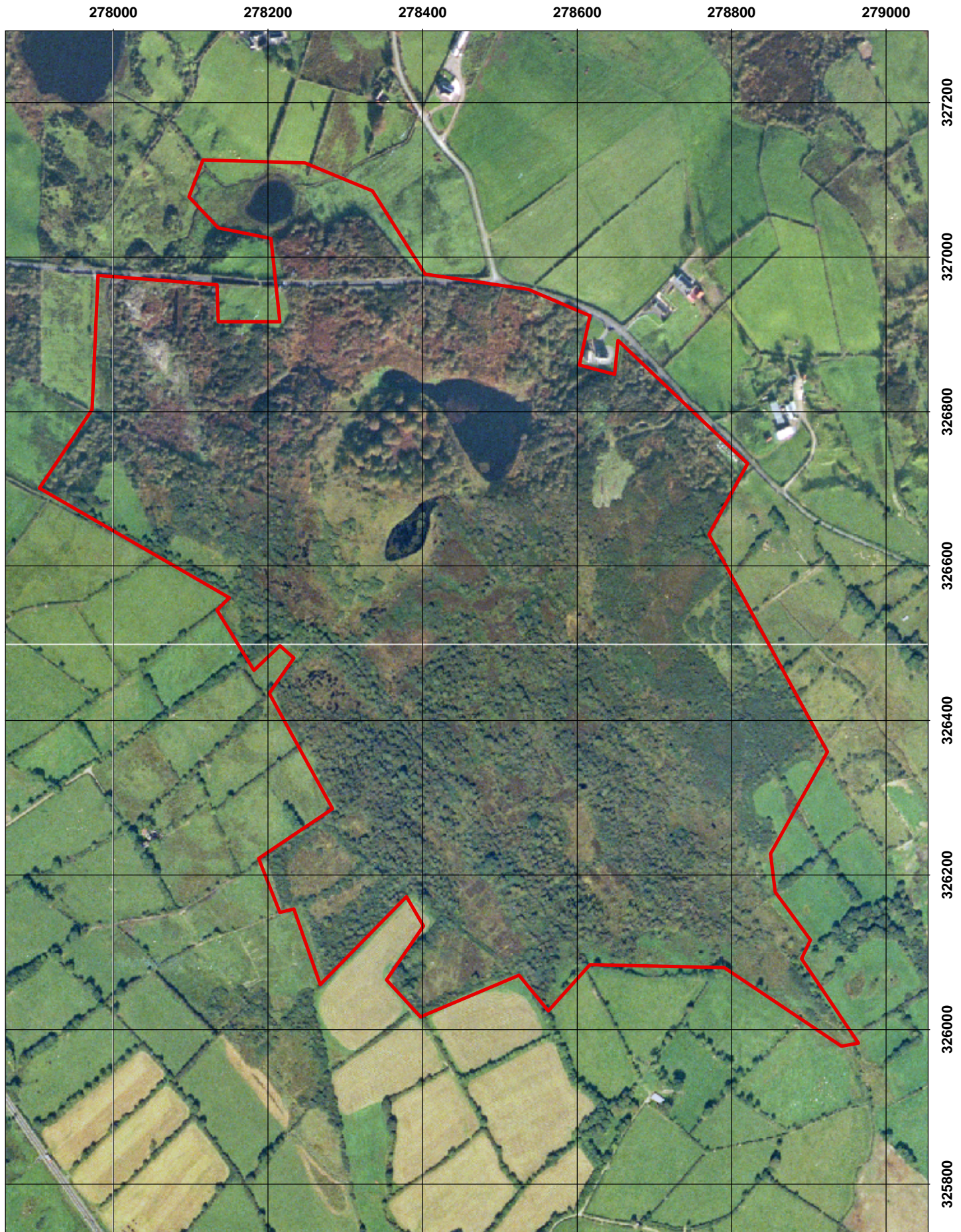
DSC 2526: P6 - Poor fen area colonising wet pools and hollows at the site. View to north.

DSC 2540: P7 - Transition mire area forming a broad band around the western edge of the smaller of the 2 lakes at Lough Nahinch. View to south-east.

DSC 2541: P7 - Transition mire area forming a broad band around the western edge of the smaller of the 2 lakes at Lough Nahinch. View to south.

DSC 2545: P7 - Transition mire area forming a broad band around the edge of Lough Nahinch.

DSC 2564: P7 - Narrow band of reed bed on the eastern shore of the smaller Lough Nahinch, with ridge covered by *Calluna vulgaris* and *Pteridium aquilinum* behind. View to east.



Site Boundary

MFS-40 Lough Nahinch

0 50 100 200 300 400 Meters





278000

278200

278400

278600

278800

279000

327200

327000

326800

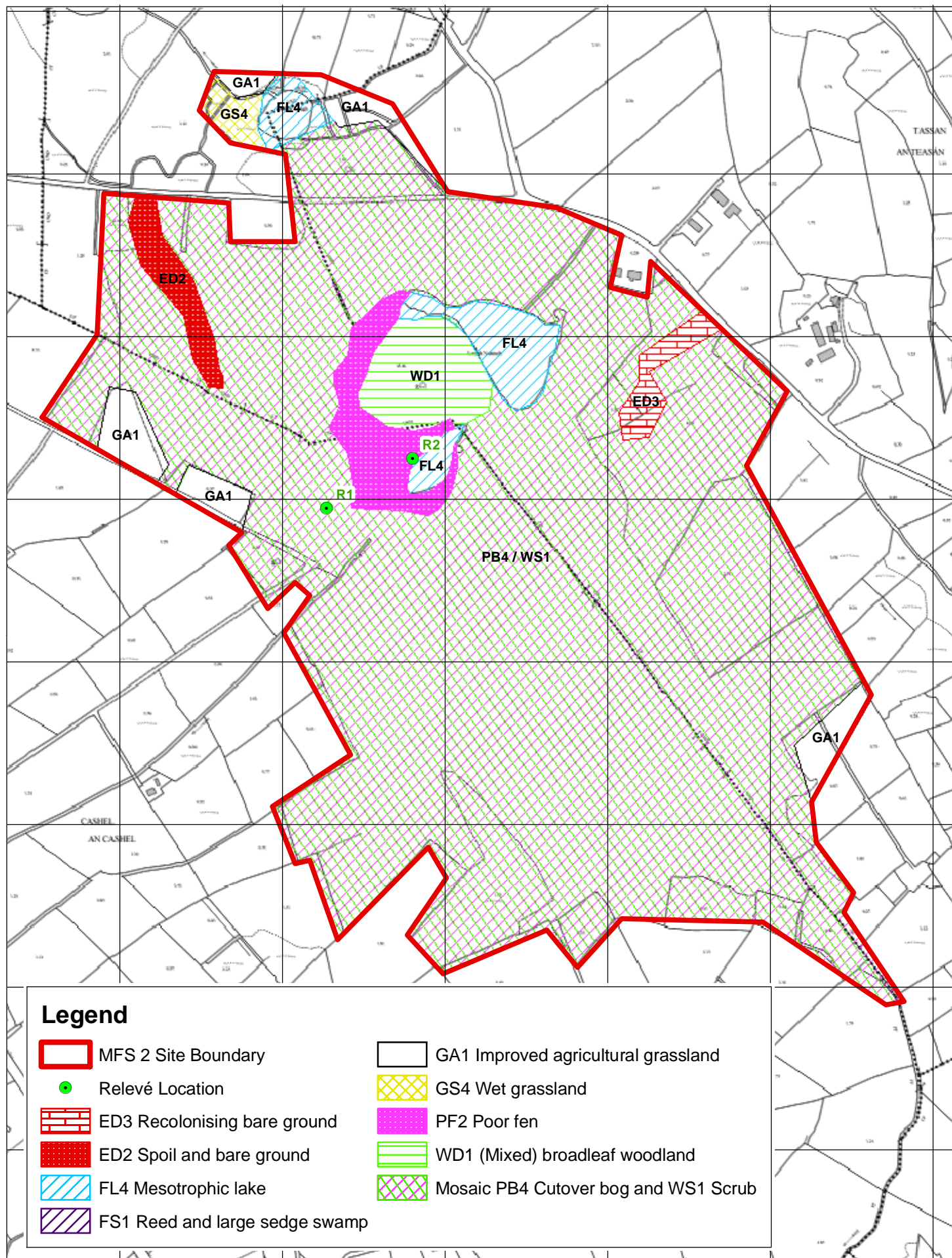
326600

326400

326200

326000

325800



Legend

- | | |
|--------------------------------|--------------------------------------|
| MFS 2 Site Boundary | GA1 Improved agricultural grassland |
| Relevé Location | GS4 Wet grassland |
| ED3 Recolonising bare ground | PF2 Poor fen |
| ED2 Spoil and bare ground | WD1 (Mixed) broadleaf woodland |
| FL4 Mesotrophic lake | Mosaic PB4 Cutover bog and WS1 Scrub |
| FS1 Reed and large sedge swamp | |

MFS-40 Lough Nahinch

0 50 100 200 300 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: LOUGH OONEY

Site Code: MFS-31

Current Conservaton Designations: Undesignated site

National Grid Reference: H 559 298

County: MO

Total Site Area (ha): 12.2

Discovery Grid Ref: 255975 329825

Vice County: H32

6" map No. MO 12

Discovery map No. 28A

Air photograph No. 1153B; 1153D;

NFS Overall Site Results Section

NFS Brief site description

An inter-drumlin lake with floating macrophytes and emergent reed vegetation around its margin.

No fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input checked="" type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The site is deemed to be of moderate ecological value. The site is likely to be of value to wildfowl but has little wetland interest.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

18 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Main Habitats on Site: LAKE, REEDBEDS

Fossitt habitat types present within site based on NFS:

FL4 Mesotrophic lakes
 FS1 Reed and large sedge swamps
 WL2 Treelines
 WN6 Wet willow-alder-ash woodland
 BL3 Buildings and artificial surfaces
 GS4 Wet grassland
 GA1 Improved agricultural grassland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
☐ Alkaline fen 7230/PF1
☐ Poor fen/PF2
☐ Transition Mire 7140/PF3
☐ Petrifying Spring 7220/FP1
☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
 Alkaline fen 7230
 Poor fens
 Transition Mire 7140
 * Petrifying Springs 7220
 Non Calcareous Springs

Total Fen Area
(sum of all fen areas)**General NFS Results Section****Townland Names:**

LOUGH OONEY; DRUMULLY (Dartree By); DRUMCRU (Renwick); BULLOGBREAN

River Catchment:

River Finn

Solid geology:

Dinantian (early) sandstones, shales and limestones

Topography:

Inter drumlin hollow site with lake

Quaternary deposits:

Cutover raised bog

Hydrology:

Outflow is towards the south west. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:**Substrate stability:****Altitude Range (m):**

70

Range Peat depth (cm):**Range Water depth (cm):****Water sample number:**

NA

Field pH range:**Field Conductivity range:****Photographic numbers:**

DSC 2324-2336 P.Foss (4 images)

NFS Site landuse, impacts, activities and threats**NFS Landuse Within site boundary****Activity**

Forestry
 Grazing - cattle

Scale

1 Rare (<5%)
 1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Roads
 Residential (scattered)

Fishing
Grazing - cattle
Meadow - silage

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|----------|-----------|-----------|
| None | | |

NFS Site Threats

| Activity | Note Number(s) |
|----------|----------------|
| None | |

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Lough Ooney is located 3 km south west of Smithborough to the north of the N54 road to Clones.

An inter-drumlin lake with a narrow band of floating macrophyte and emergent reed vegetation around its margin. Improved agricultural grassland extends almost to the shore along the northern side. At the eastern end of the lake the reed communities grade into wet Alder (*Alnus glutinosa*) woodland. The south-eastern boundary of the lake is delineated by a line of mature beech adjacent to the main Clones to Monaghan Road.

The site is likely to be of value to wildfowl but has little wetland interest.

No fen habitats were recorded at the site.

NFS Site Notes

N1 Habitat: Wet woodland area with *Salix cinerea* and *Alnus glutinosa*.

N2 Habitat: Wet grassland area with *Juncus effusus*.

N3 Habitat: Reed bed swamp composed mainly of *Phragmites australis*, *Typha latifolia* and *Schoenoplectus lacustris*.

Other species recorded in the reed community include *Carex rostrata*, *Mentha aquatica*, *Lemna minor*, *Angelica sylvestris*.

NFS Species recorded on site

MFS 2008 Fauna records - Cormorant (1); Grebe (2 plus juvenile)

NFS Ground Photographic Notes

DSC 2324: P1 - *Typha latifolia* reed bed fringe on the southern shore of Lough Ooney. View to north-east.

DSC 2330: P2 - *Typha latifolia* reed bed fringe on the southern shore of Lough Ooney, with similar community on the western shore. View to west.

DSC 2334: P3 - *Typha latifolia* reed bed fringe on the north western shore of Lough Ooney. View to north west.

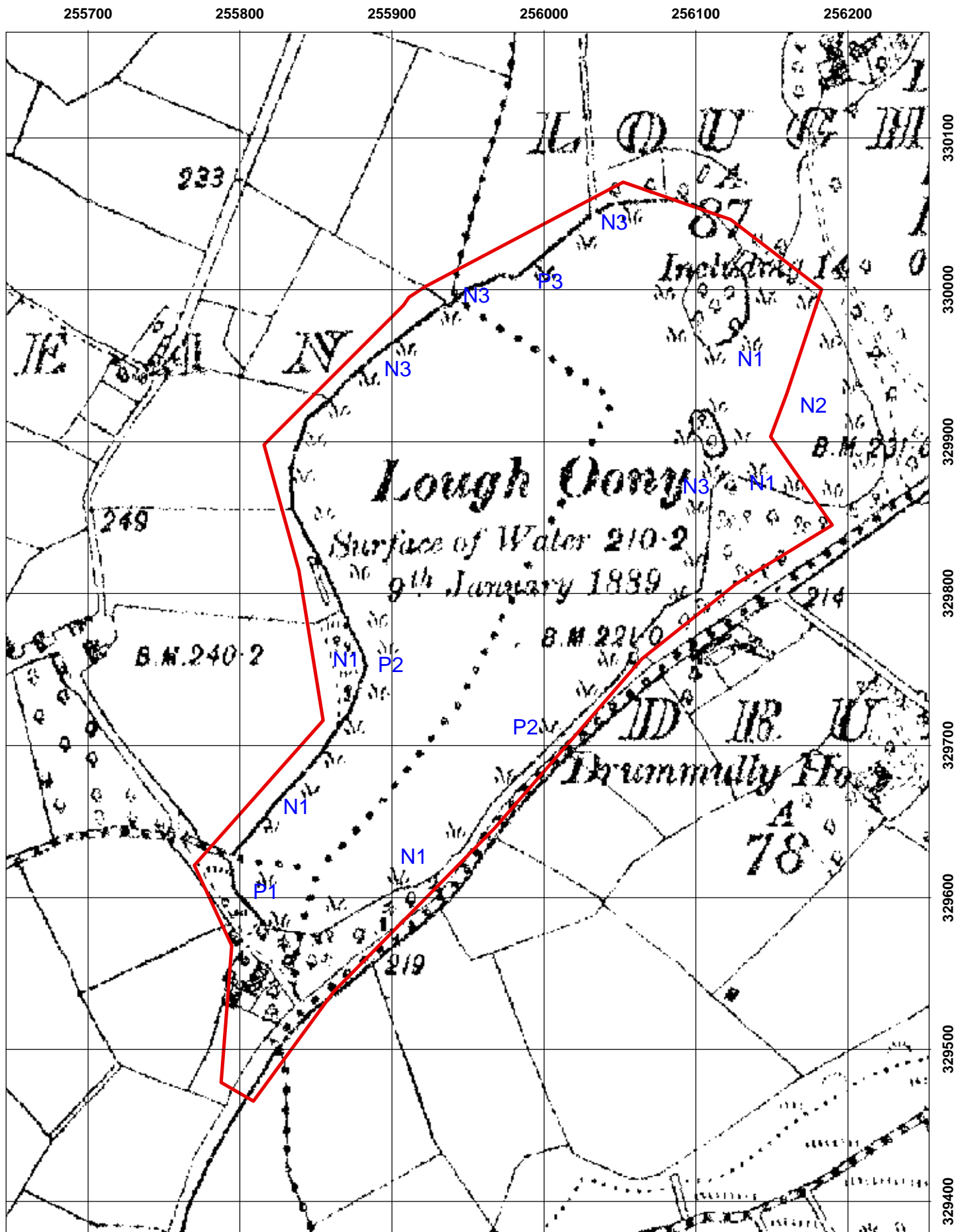
DSC 2336: P3 - *Typha latifolia* reed bed fringe on the north western shore of Lough Ooney, with a narrow *Schoenoplectus lacustris* fringe in front and extending a short distance into open water of lake. View to the north west.



Site Boundary
MFS-31 Lough Ooney

0 25 50 100 150 Meters





Site Boundary

MFS-31 Lough Ooney

0 25 50 100 150 Meters

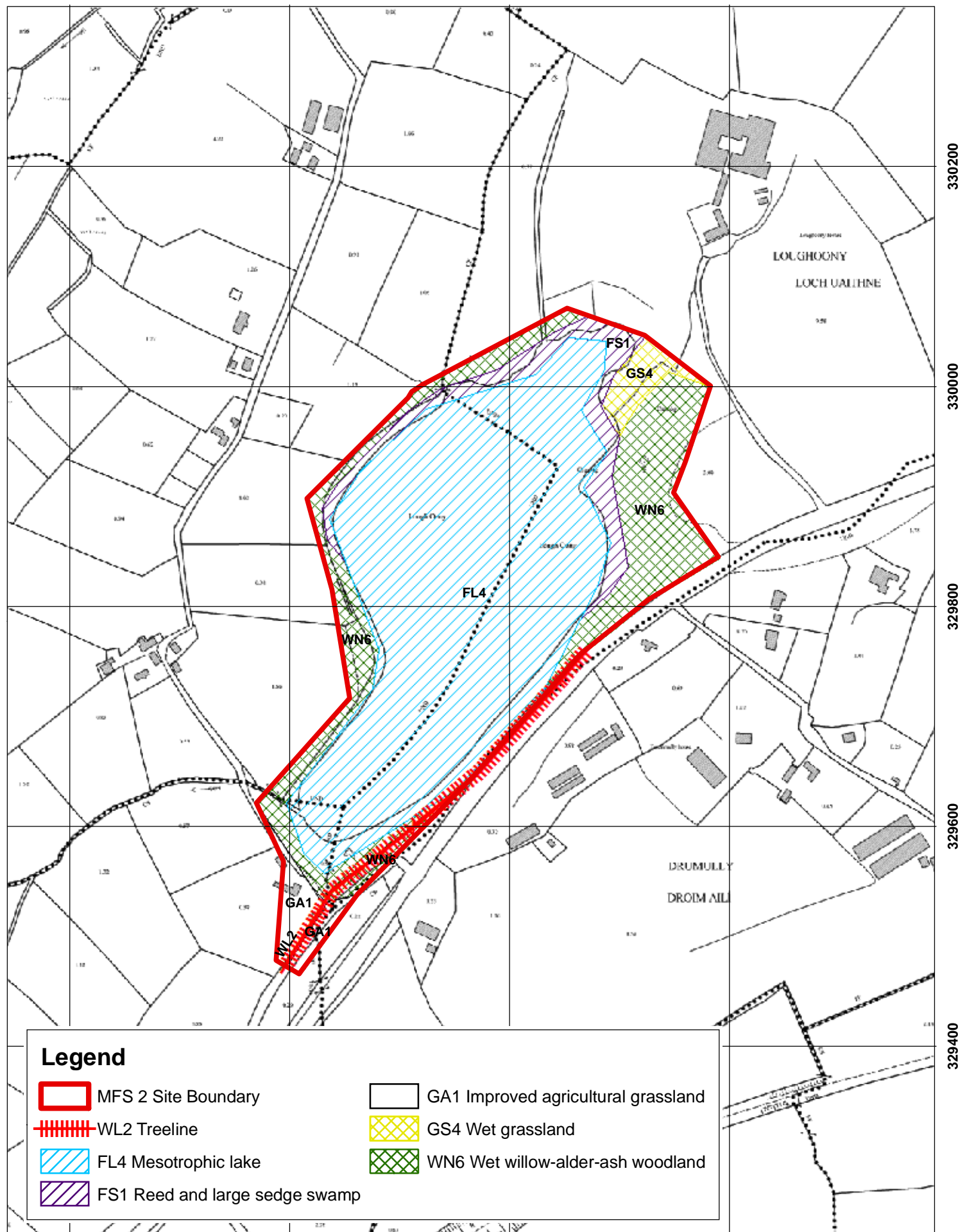


255600

255800

256000

256200



National Fen Survey of Ireland Database - Site Synopsis

Site Name: MOUNT MATTHEWS

Site Code: MFS-32

Current Conservaton Designations: Undesignated site

National Grid Reference: H 943 084

County: MO LH

Total Site Area (ha): 20.4

Discovery Grid Ref: 294371 308373

Vice County: H32

6" map No.

Discovery map No. 36

Air photograph No. 1629A; 1629B;

NFS Overall Site Results Section

NFS Brief site description

An inter-drumlin lake that has been largely terrestrialised by an extensive floating raft of transition mire. In places the transition mire is becoming more ombrotrophic in character with incipient bog vegetation developing. Wet woodland and reed swamp also occurs.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input checked="" type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The transition mire is a good example of this vegetation type and is likely to be of similar quality on the Louth side of the site. The site is deemed to be of high ecological value.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

14 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Additional Survey may be required

Releve data collected

New NHA site card created

Water chemistry samples collected

Main Habitats on Site: TRANSITION MIRE, WET WOODLAND, REEDBEDS

Fossitt habitat types present within site based on NFS:

BL3 Buildings and artificial surfaces
 GA Improved Grassland
 GA1 Improved agricultural grassland
 GS4 Wet grassland
 PF3 Transition mire & quaking bog
 WL1 Hedgerows
 WN6 Wet willow-alder-ash woodland
 FS1 Reed and large sedge swamps

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
☐ Alkaline fen 7230/PF1
☐ Poor fen/PF2
☒ Transition Mire 7140/PF3
☐ Petrifying Spring 7220/FP1
☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

* Cladium Fen 7210
 Alkaline fen 7230
 Poor fens
 Transition Mire 7140 5.59
 * Petrifying Springs 7220
 Non Calcareous Springs

Total Fen Area
(sum of all fen areas)

5.59

General NFS Results Section**Townland Names:**

CARRICKYKELLY; DRUMMOND (ED Inishkeen);
 CARRACLOGHAN; GORTEEN

River Catchment:

River Fane

Solid geology:

Silurian metasediments and volcanics

Topography:

Inter drumlin hollow site with reed beds and transition mire

Quaternary deposits:

Cutover raised bog

Hydrology:

Inflow from the west. No clear outflow visible. Site receives
 surface runoff from surrounding higher drumlins.

Corine Landcover:

243 Agricultural land with natural vegetation

Releve numbers:

MFS-32/R1

Substrate type:

Peat

Substrate stability:

Quaking

Altitude Range (m):

65

Range Peat depth (cm):

200

Range Water depth (cm):

-20

Water sample number:

MFS-32/W1 & W2

Field pH range:**Field Conductivity range:**

168

Photographic numbers:

DSC 1979-1998 P.Foss (8 images)

NFS Site landuse, impacts, activities and threats**NFS Landuse Within site boundary****Activity**

Meadow - silage
 Grazing - cattle

Scale

1 Rare (<5%)
 1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Meadow - silage
 Grazing - cattle
 Agricultural buildings
 Other (define):

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|--------------------------------------|------------|-------------|
| 951 accumulation of organic material | B = medium | 0 = neutral |

NFS Site Threats

| Activity | Note Number(s) |
|--------------------------------------|----------------|
| 951 accumulation of organic material | N/A |
| 954 invasion by a species | N/A |

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Mount Matthews is located 1.5 km north east of Inishkeen, and on the border with County Louth.

This relatively large terrestrialsed lake has a floating raft of transition mire across much of its surface. The transition mire area (towards margin of former lake) has typical species composition and a well developed moss layer. In this area, raised hummocks of *Sphagnum palustre* and *Aulacomnium palustre* with Round-leaved Sundew (*Drosera rotundifolia*) indicate that the vegetation is becoming more ombrotrophic (bog-like) with a likely increased influence of rain-water.

Towards the centre of the former lake, reeds become more abundant and the habitat grades into reed swamp with Common Reed (*Phragmites australis*) and Bulrush (*Typha latifolia*) dominant. The northern part of the site occurs in County Louth and appears to have similar transition mire vegetation with an abundance of Common Cotton-grass (*Eriophorum angustifolium*) thereby indicating that it may be regenerating on cutover bog.

The eastern part of the site is dominated by wet woodland (Alder (*Alnus glutinosa*) and Grey Willow (*Salix cinerea*) dominated) while the western portion comprises dense Common Reed (*Phragmites australis*) swamp.

The surrounding land-use is intensive pastoral farming on improved agricultural grassland. Large electricity pylons located placed in the adjacent fields with power-lines traversing the site.

The transition mire is a good example of this vegetation type and is likely to be of similar quality on the Louth side of the site.

Additional survey of the northern section of the site in County Louth may be required to establish full extent of Transition Mire on the site.

NFS Site Notes

N1 Habitat: Wet willow and alder woodland.

N2 Habitat: *Phragmites australis* dominated reed bed community.

N3 Habitat: Quaking transition mire community with *Carex diandra* and scattered *Phragmites australis* and willow scrub forming an open fen community. This habitat type extended over the county border into Louth.

See relevé number MFS-32 R1 for details. Relevé location: 294369 308267.

N4 Habitat: Drainage channel linking the western reed dominated area to the eastern section with transition mire and willow scrub areas.

NFS Species recorded on site

MFS 2008 Fauna records - Buzzard over site (3); Frog (2)

NFS Ground Photographic Notes

DSC 1979: P1 - Willow scrub area with open areas of transition mire at the eastern end of the site. View to north.

DSC 1982: P1 - Transition mire area with scattered *Phragmites australis* at the eastern end of the site. View to north.

DSC 1987: P1 - Transition mire area with scattered *Phragmites australis* at the eastern end of the site.

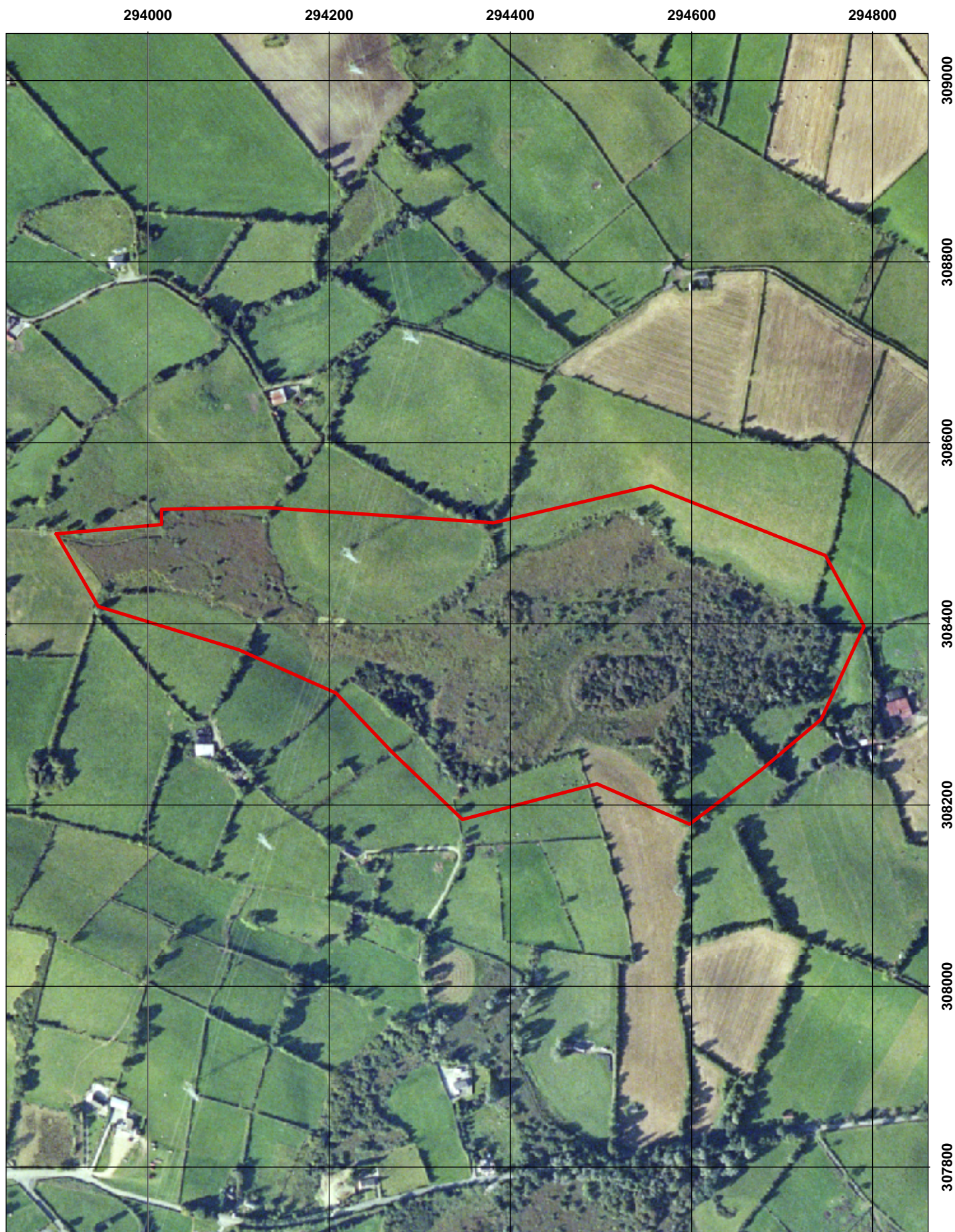
DSC 1993: P2 - *Phragmites australis* dominated reed bed at the western end of the site. View to north.

DSC 1994: P2 - *Phragmites australis* dominated reed bed at the western end of the site. View to north.

DSC 1995: P2 - *Phragmites australis* dominated reed bed at the western end of the site. View to north.

DSC 1997: P3 - Transition mire area at the north-western end of the site, which extends into County Louth. Some areas show an increase in the cover of wet willow woodland. View to north-east.

DSC 1998: P4 - Drainage channel between the *Phragmites australis* dominated reed bed at the western end of the site and the transition mire to the east. View to north.



 Site Boundary

MFS-32 Mount Matthews

0 50 100 200 300 400 Meters





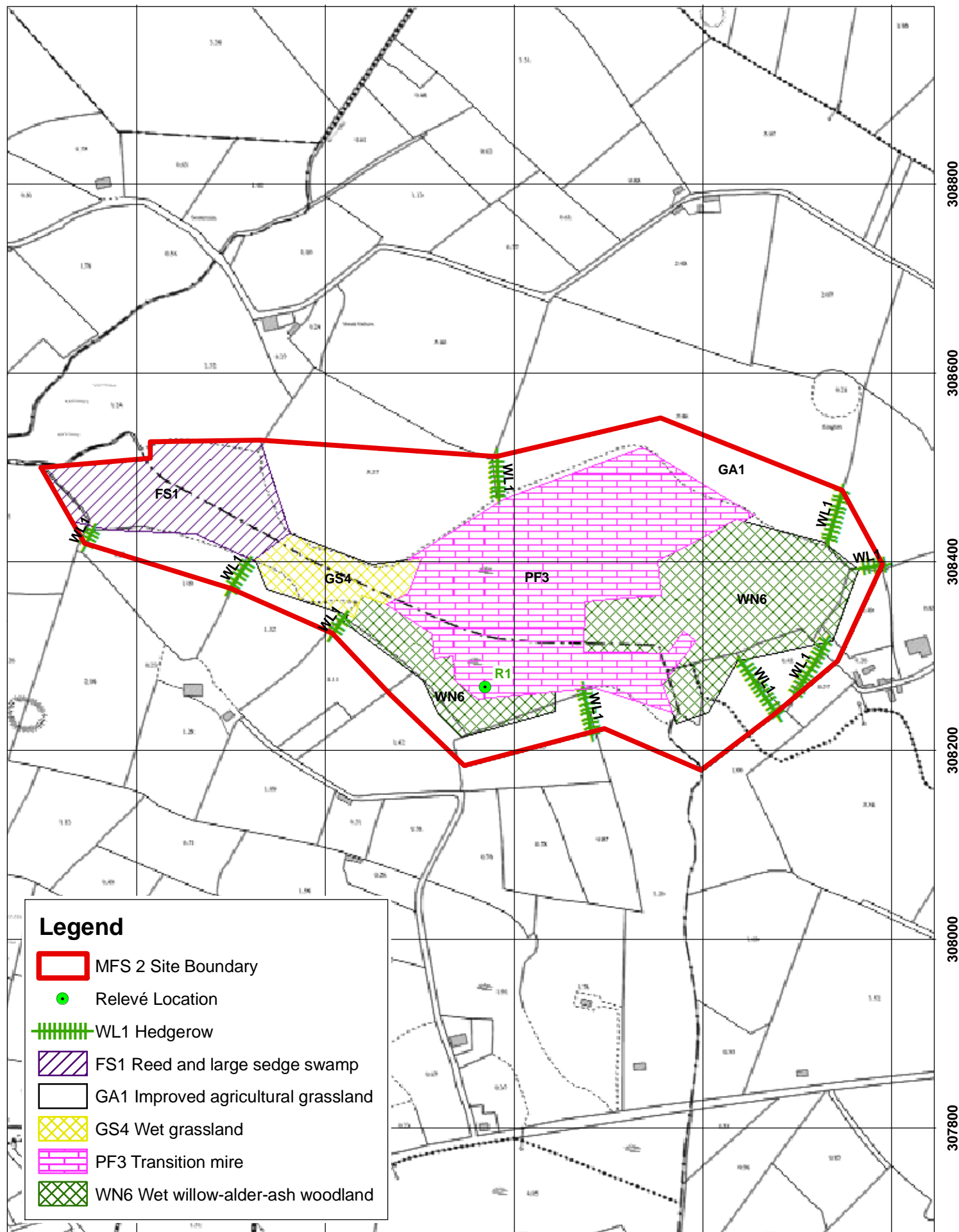
294000

294200

294400

294600

294800



Legend

- MFS 2 Site Boundary
- Relevé Location
- ||||| WL1 Hedgerow
- FS1 Reed and large sedge swamp
- GA1 Improved agricultural grassland
- GS4 Wet grassland
- PF3 Transition mire
- WN6 Wet willow-alder-ash woodland

MFS-32 Mount Matthews

0 50 100 200 300 400 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: MUCKNO MILL LOUGH

Site Code: MFS-33

Current Conservaton Designations: Undesignated site

National Grid Reference: H 842 226

County: MO

Total Site Area (ha): 36.8

Discovery Grid Ref: 284200 322600

Vice County: H32

6" map No.

Discovery map No. 28B

Air photograph No. 1287D; 1288C

NFS Overall Site Results Section

NFS Brief site description

The margin of this fishing lake comprises floating macrophyte and emergent reed communities along its southern shore. Elsewhere, improved pasture extends to the shore.

No fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input checked="" type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The site is deemed to be of moderate ecological value. The site is likely to be of value to wildfowl.

Fen Survey Conservation Recommendations based on NFS

Further illegal fly tipping of garden waste on the lakeshore should be prevented by limiting access.

NFS Date of Survey:

17 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Main Habitats on Site: LAKE, REEDBEDS, WET WOODLAND

Fossitt habitat types present within site based on NFS:

- BL3 Buildings and artificial surfaces
- FL Lakes & Ponds
- FL4 Mesotrophic lakes
- FS1 Reed and large sedge swamps
- FW1 Eroding/upland rivers
- FW4 Drainage ditches
- GA1 Improved agricultural grassland
- GS4 Wet grassland
- WL1 Hedgerows
- WN6 Wet willow-alder-ash woodland
- WS1 Scrub

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
- ☐ Alkaline fen 7230/PF1
- ☐ Poor fen/PF2
- ☐ Transition Mire 7140/PF3
- ☐ Petrifying Spring 7220/FP1
- ☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
- Alkaline fen 7230
- Poor fens
- Transition Mire 7140
- * Petrifying Springs 7220
- Non Calcareous Springs

Total Fen Area
(sum of all fen areas)**General NFS Results Section****Townland Names:**

DRUMLEEK NORTH; LISDONNY; LURGANMORE;
DRUMALISS; ERRYBANE

River Catchment:

Lough Muckno; River Fane

Solid geology:

Silurian metasediments and volcanics

Topography:

Inter drumlin hollow site with large lake

Quaternary deposits:

Cutover raised bog

Hyrdology:

Inflow from the north east, outflow to the south west. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:**Substrate stability:****Altitude Range (m):**

98

Range Peat depth (cm):**Range Water depth (cm):****Water sample number:**

NA

Field pH range:**Field Conductivity range:**

Lake water conductivity 258

Photographic numbers:

DSC 2202-2218 P.Foss (7 images)

NFS Site landuse, impacts, activities and threats**NFS Landuse Within site boundary****Activity**

Meadow - silage

Scale

1 Rare (<5%)

| | |
|------------------|--------------|
| Grazing - cattle | 1 Rare (<5%) |
| Fishing | 1 Rare (<5%) |
| Roads | 1 Rare (<5%) |
| Walking | 1 Rare (<5%) |

NFS Surrounding Landuse - Outside site boundary

Meadow - silage
Grazing - cattle
Agricultural buildings
Roads

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|---|-----------|------------------------------------|
| 803 infilling of ditches, dykes, ponds, pools, marshes or | C = low | - 1 = reparable negative influence |
| 622 walking, horseriding & non-motorised vehicles | C = low | 0 = neutral |

NFS Site Threats

| Activity | Note Number(s) |
|----------|----------------|
| None | |

NFS Site Description; Notes and Ground Photograph Captions**NFS Site Synopsis with Fen interest description**

Muckno Mill Lough is located 3 km north east of Castleblaney, 0.75 km north of the R182 road to Newtownhamilton.

This relatively large lake has extensive reed swamp adjoining its southern shore. The swamp is dominated by Reed Canary-grass (*Phalaris arundinacea*) with encroaching Grey Willow (*Salix cinerea*) throughout. Wet woodland has developed in places within the swamp.

The northern lake shore lacks a reed fringe and the transition to improved agricultural grassland is abrupt.

Artificial fishing platforms have been constructed along the lake shore to facilitate coarse fishing. Dumping of domestic refuse was recorded along at the eastern end of the lake. A stream enters the lake at its western end.

No fen habitats were recorded at the site. The site is likely to be of value to wildfowl.

NFS Site Notes

N1 Habitat: Reed bed areas composed of *Phalaris arundinacea* and containing *Filipendula ulmaria*, *Epilobium hirsutum*, *Salix cinerea*, *Alnus glutinosa*, *Schoenoplectus lacustris*. In some parts Willow and Alder

N2 Habitat: Wet grassland with *Juncus effusus*. On the northern side of the lake this community extends down to the lake shore with no significant reed fringe present.

N3 Habitat: Scrub area dominated by Gorse (*Ulex europaeus*).

N4 Damage: Drainage ditch

N5 Interpretation: Car park area infilled onto wetland area beside lake with metal raised walkway extending out into lake.

N6 Damage: Area where garden waste is being dumped illegally at the edge of the lake. A small trackway leads from the car park along the edge of the lakes which allows access for illegal dumping.

N7 Habitat: Wet woodland with Alder and Willow.

NFS Species recorded on site

MFS 2008 Fauna records - Heron (1); Mute Swan (8)

NFS Ground Photographic Notes

DSC 2202: P1 - Phalaris arundinacea dominated marsh area with scattered willow trees at the southern end of the site. View to north-west.

DSC 2205: P1 - Phalaris arundinacea dominated marsh area with scattered willow trees at the southern end of the site, with Muckno Mill Lough in the distance. View to north-west.

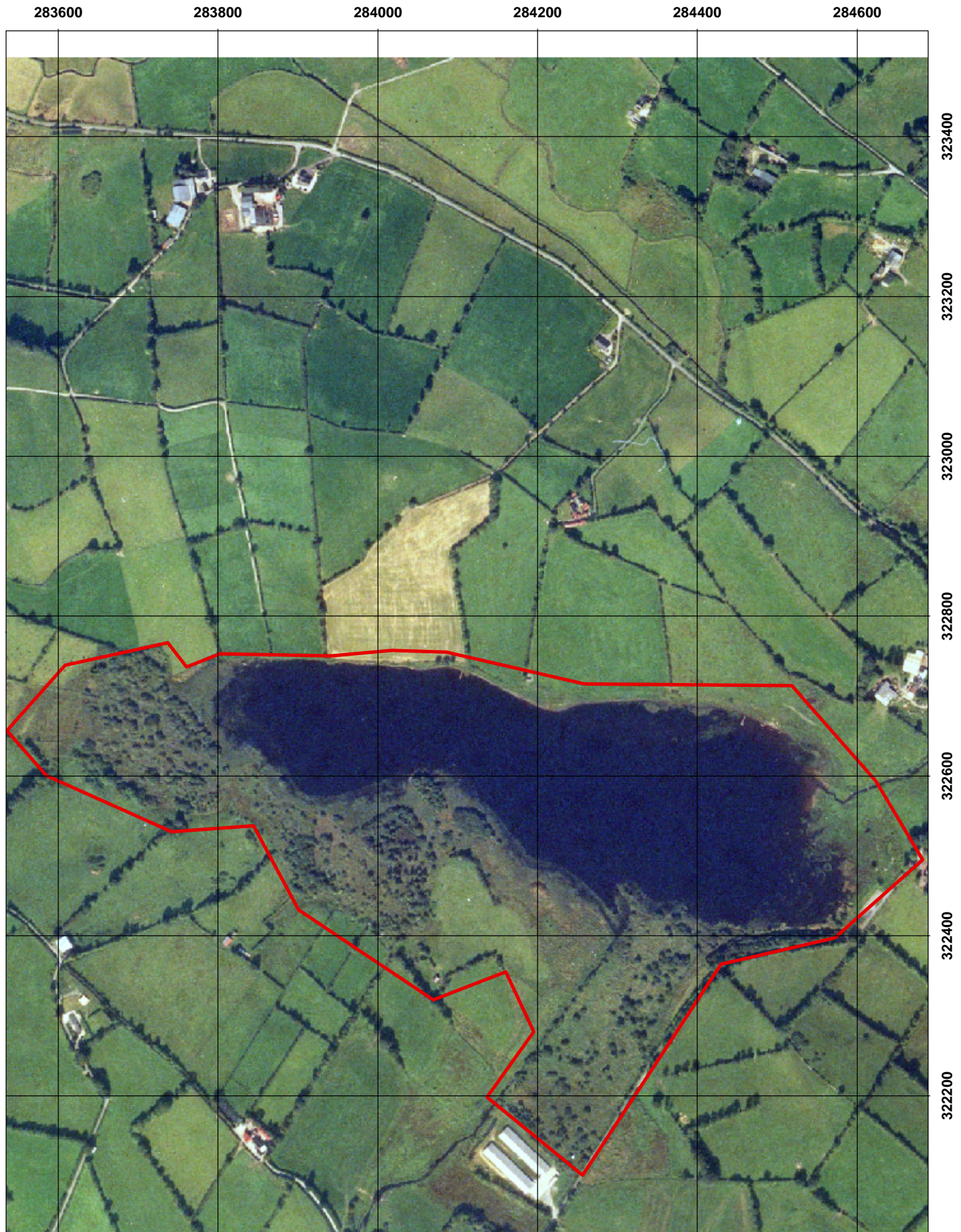
DSC 2206: P2 - Phalaris arundinacea dominated marsh area at the eastern end of Muckno Mill Lough. View to north-west.

DSC 2208: P3 - Phalaris arundinacea dominated marsh area at the eastern end of the lake, with fishing platform. View to west.

DSC 2211: P3 - Phalaris arundinacea dominated marsh area at the eastern end of the lake, with emergent Carex rostrata and Nuphar lutea.

DSC 2214: P5 - Eastern end of the lake, with emergent Nuphar lutea. View to west.

DSC 2218: P4 - Eastern end of the lake, where recent dumping of garden waste was noted.

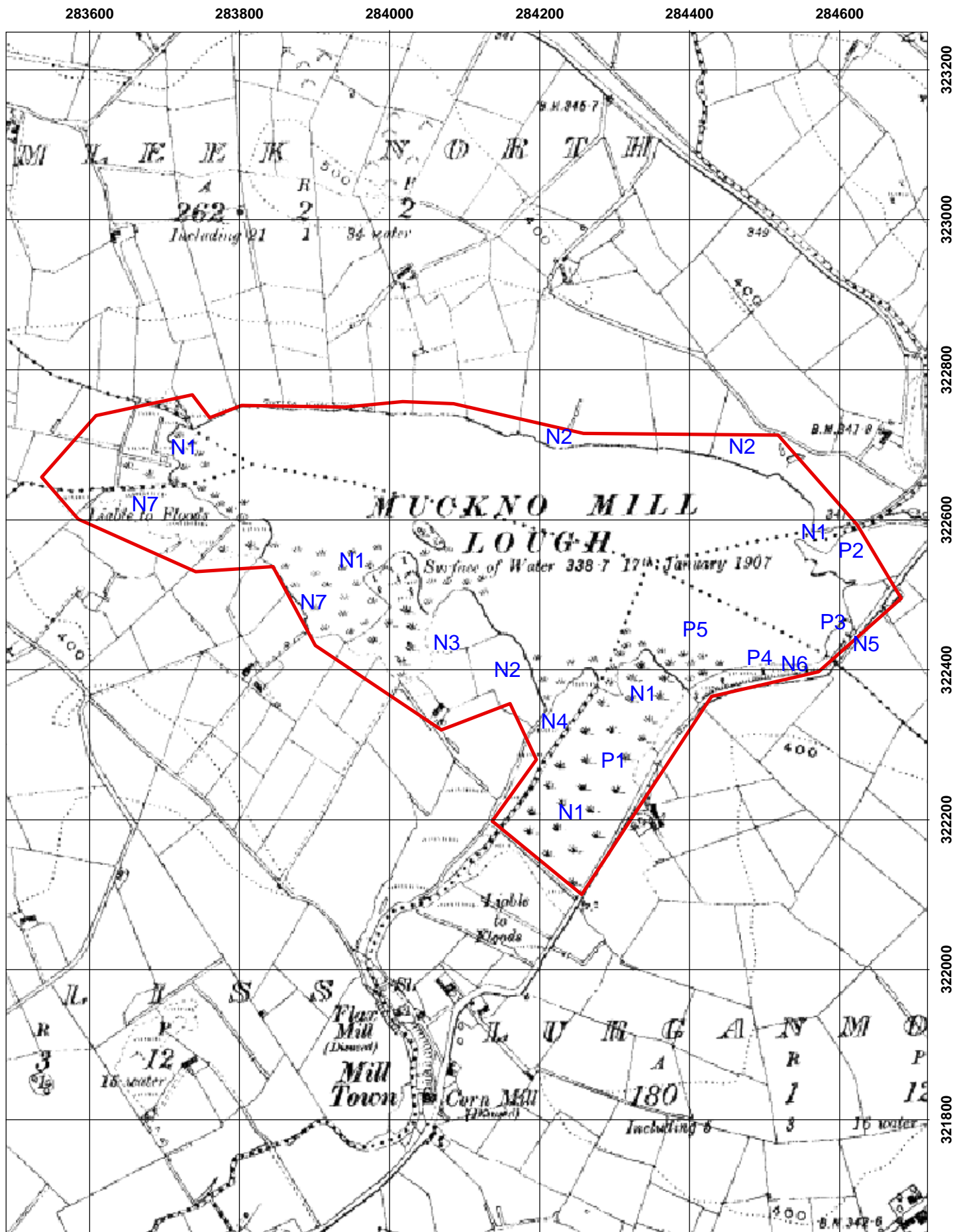


Site Boundary

MFS-33 Muckno Mill Lough

0 50 100 200 300 400 Meters



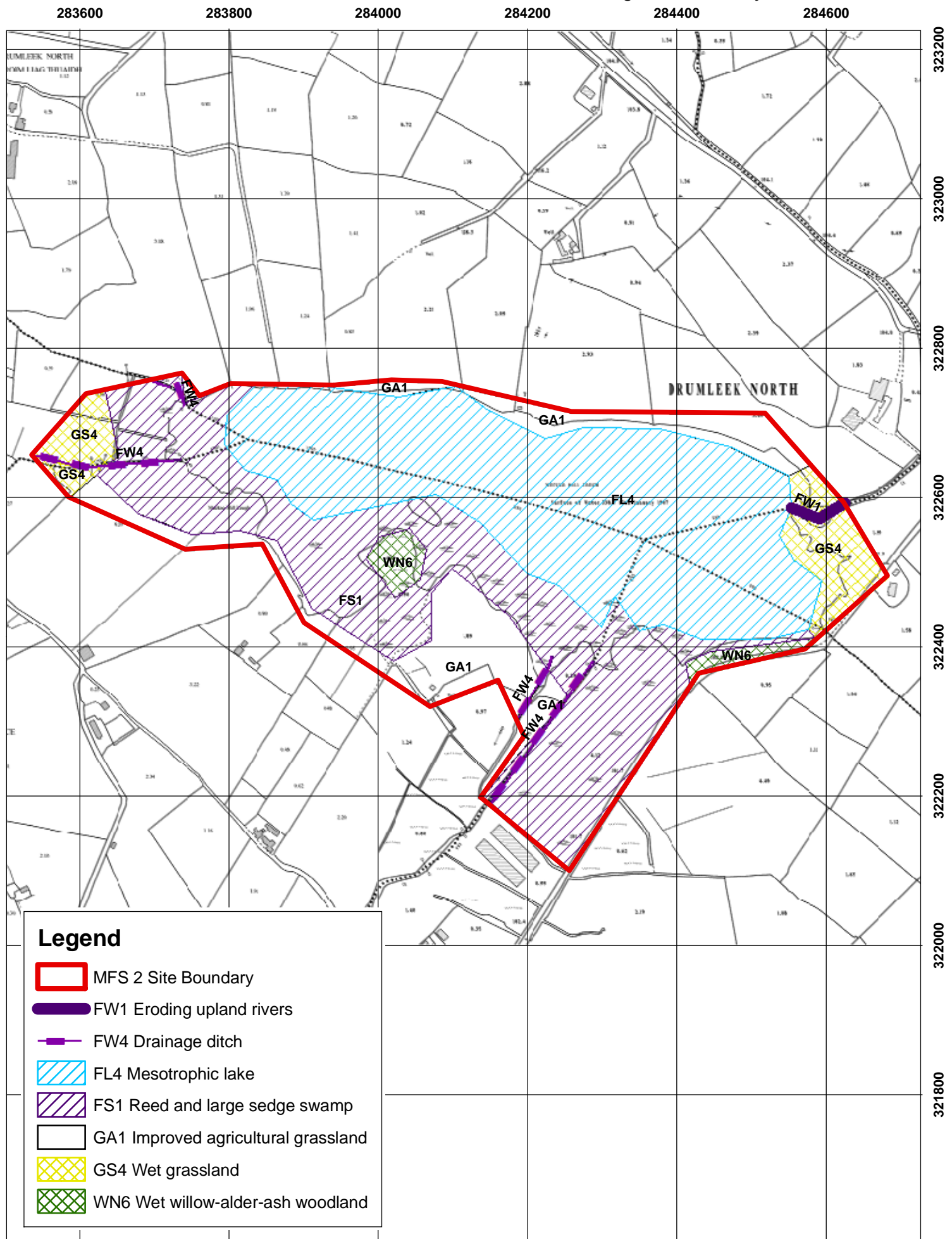


Site Boundary

MFS-33 Muckno Mill Lough

0 50 100 200 300 400 Meters





National Fen Survey of Ireland Database - Site Synopsis

Site Name: RAHANS LOUGH

Site Code: 002844

Current Conservaton Designations: pNHA

National Grid Reference: H 833 979

County: MO ME

Total Site Area (ha): 34.9

Discovery Grid Ref: 283330 297904

Vice County: H32

6" map No.

Discovery map No. 35

Air photograph No. 1826D; 1887B

NFS Overall Site Results Section

NFS Brief site description

A relatively large mesotrophic lake with extensive areas of floating macrophytes. Reed communities are present surrounding much of the lake. Elsewhere, improved pasture extends down to the shore which comprises a stony littoral zone.

There is no fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input checked="" type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The site is deemed to be of high ecological value. The site is designated a proposed Natural Heritage Area.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

14 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

NPWS Habitat Assignment Project exists
Detailed site survey (NFS) undertaken
New NHA site card created

Main Habitats on Site: LAKE, REEDBEDS, WET WOODLAND

Fossitt habitat types present within site based on NFS:

- GA1 Improved agricultural grassland
- GS4 Wet grassland
- WS1 Scrub
- ER2 Exposed calcareous rock
- FL4 Mesotrophic lakes
- FS1 Reed and large sedge swamps
- HH2 Dry calcareous heath
- BL3 Buildings and artificial surfaces
- ED2 Spoil and bare ground
- FW4 Drainage ditches
- WL1 Hedgerows
- WN6 Wet willow-alder-ash woodland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
- ☐ Alkaline fen 7230/PF1
- ☐ Poor fen/PF2
- ☐ Transition Mire 7140/PF3
- ☐ Petrifying Spring 7220/FP1
- ☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
- Alkaline fen 7230
- Poor fens
- Transition Mire 7140
- * Petrifying Springs 7220
- Non Calcareous Springs

Total Fen Area
(sum of all fen areas)

General NFS Results Section

Townland Names:

DRUMBO; MASON LODGE; LEITRIM (Farney By); RAHANS (ED Lough Fea); DESCART (Farney By); BARLEYHILL; DERRY (Farney By)

River Catchment:

River Glyde

Solid geology:

Dinantian pure bedded limestone

Topography:

Inter drumlin hollow site with large lake

Quaternary deposits:

Till derived from palaeozoic sandstones and shales

Hydrology:

Outflow to the south. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:

Substrate stability:

Altitude Range (m):

24

Range Peat depth (cm):

Range Water depth (cm):

Water sample number:

NA

Field pH range:

Field Conductivity range:

Photographic numbers:

DSC 2024-2027 P.Foss (4 images)

NFS Site landuse, impacts, activities and threats

NFS Landuse Within site boundary

Activity

Scale

| | |
|------------------|--------------|
| | |
| Fishing | 1 Rare (<5%) |
| Roads | 1 Rare (<5%) |
| Grazing - cattle | 1 Rare (<5%) |

NFS Surrounding Landuse - Outside site boundary

Grazing - cattle
Residential (scattered)
Meadow - silage
Roads

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|---------------------|-----------|-----------|
| 220 Leisure fishing | C = low | Unknown |

NFS Site Threats

| Activity | Note Number(s) |
|----------|----------------|
| None | N/A |

NFS Site Description; Notes and Ground Photograph Captions**NFS Site Synopsis with Fen interest description**

Rahans Lough is located 6.5 km due south of Carrickmacross on the border with County Cavan.

Large mesotrophic lake that is used for recreational fishing with fishing platforms constructed along the western shore. Unconfirmed report of Zebra mussel present within the lake (S. Clerkin pers. comm.).

The shore-line is stony throughout much of its length and therefore has poor wetland flora although reed beds occur in the more sheltered parts. The reed zone where it is present contains Common Club-rush (*Schoenoplectus lacustris*), Bulrush (*Typha latifolia*) and Common Reed (*Phragmites australis*).

Floating macrophyte zone comprising mainly Yellow Water-lily (*Nuphar lutea*) and Pondweeds (*Potamogeton* spp.) is extensive across much of the open-water.

Wet woodland (Alder (*Alnus glutinosa*) and Grey Willow (*Salix cinerea*) dominated) borders the lake on the northern side. To the east of the lake an extensive area of Gorse (*Ulex europaeus*) scrub thicket has developed on a hilly area with rock outcrops.

No fen habitats were recorded at the site. The site is designated a proposed Natural Heritage Area.

NFS Site Notes

N1 Habitat: Wet willow alder woodland areas on the lakeshore.

N2 Damage: Access road and boat ramp down into the lake.

N3 Habitat: Marginal reed bed vegetation with *Schoenoplectus lacustris* extending out into open water (up to 10 m), and a zone of *Phragmites australis* dominated reed bed on the landward side (10-20 m wide).

General species recorded in the lakeshore reed bed zone included: *Lemna trisulca*, *Carex rostrata*, *Phragmites australis*, *Phalaris arundinacea*, *Schoenoplectus lacustris*, *Nuphar lutea*, *Salix cinerea*, *Alnus glutinosa*, *Lythrum salicaria*, *Elodea canadensis*, *Caltha palustris*.

Nuphar lutea forms a floating carpet into the open water and increases in abundance as one moves to the south of the lake.

N4 Landuse: A series of 6 well constructed metal fishing platforms and access walks running through the

Phragmites reed bed to the open water have been constructed on the western side of the lake.
N1 Habitat: Areas of exposed rocky shore occur at this location.

NFS Species recorded on site

MFS 2008 Fauna records - Green-veined white (1); Mute Swans (24); Great crested-grebe (2); Coot (1); Moorhen (1)

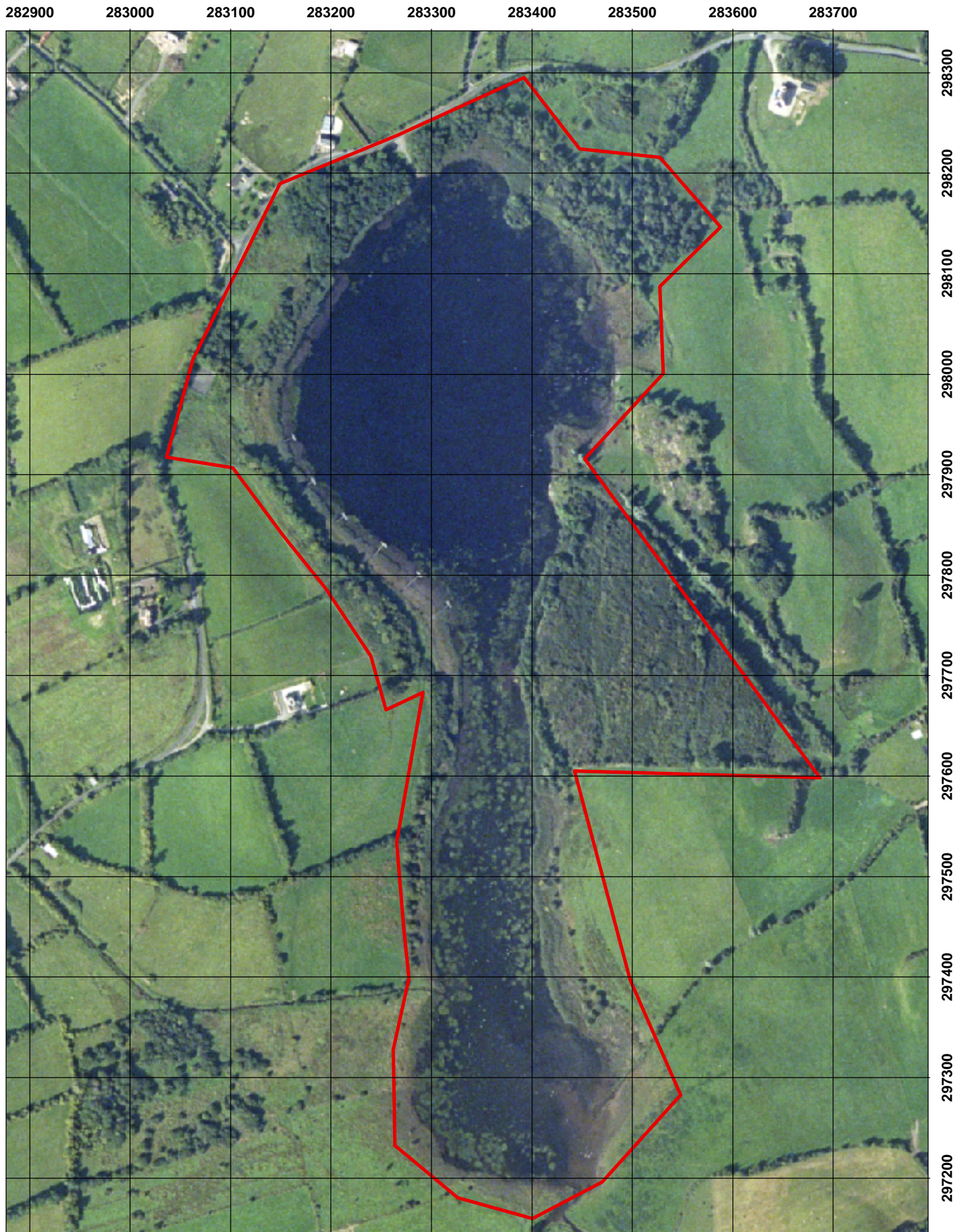
NFS Ground Photographic Notes

DSC 2024: P1 - Northern shore of the lake, with narrow reed bed zone. View to south.

DSC 2025: P2 - Northern shore of the lake, with narrow reed bed zone. View to east.

DSC 2026: P3 - Northern shore of the lake, with narrow reed bed zone. View to west with a number of fishing platforms located in the reed bed on the lake shore.

DSC 2027: P2 - Northern shore of the lake, with narrow reed bed zone. View to east.

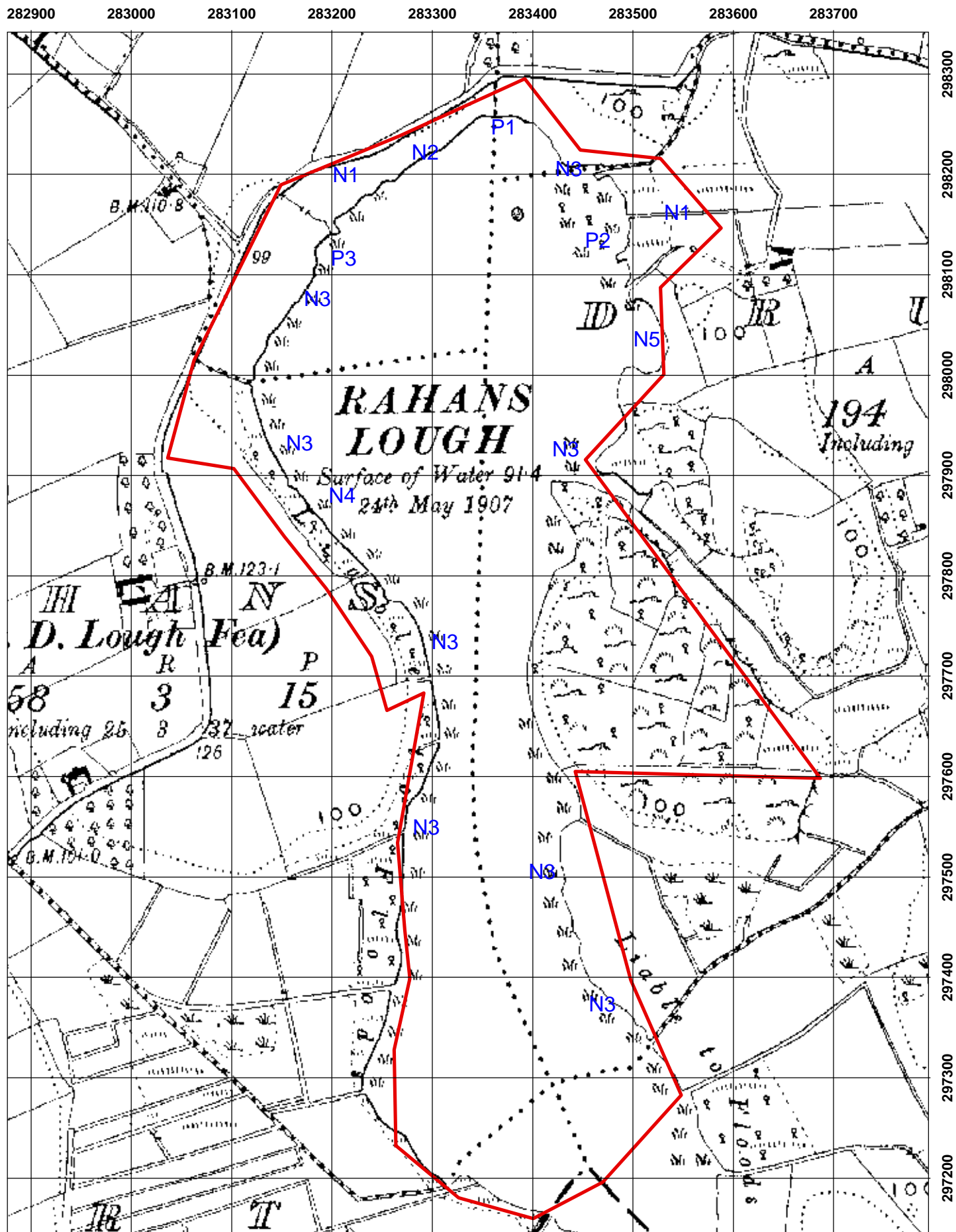


Site Boundary

2844 Rahans Lough

0 50 100 200 300 Meters





Site Boundary

2844 Rahans Lough

0 50 100 200 300 Meters



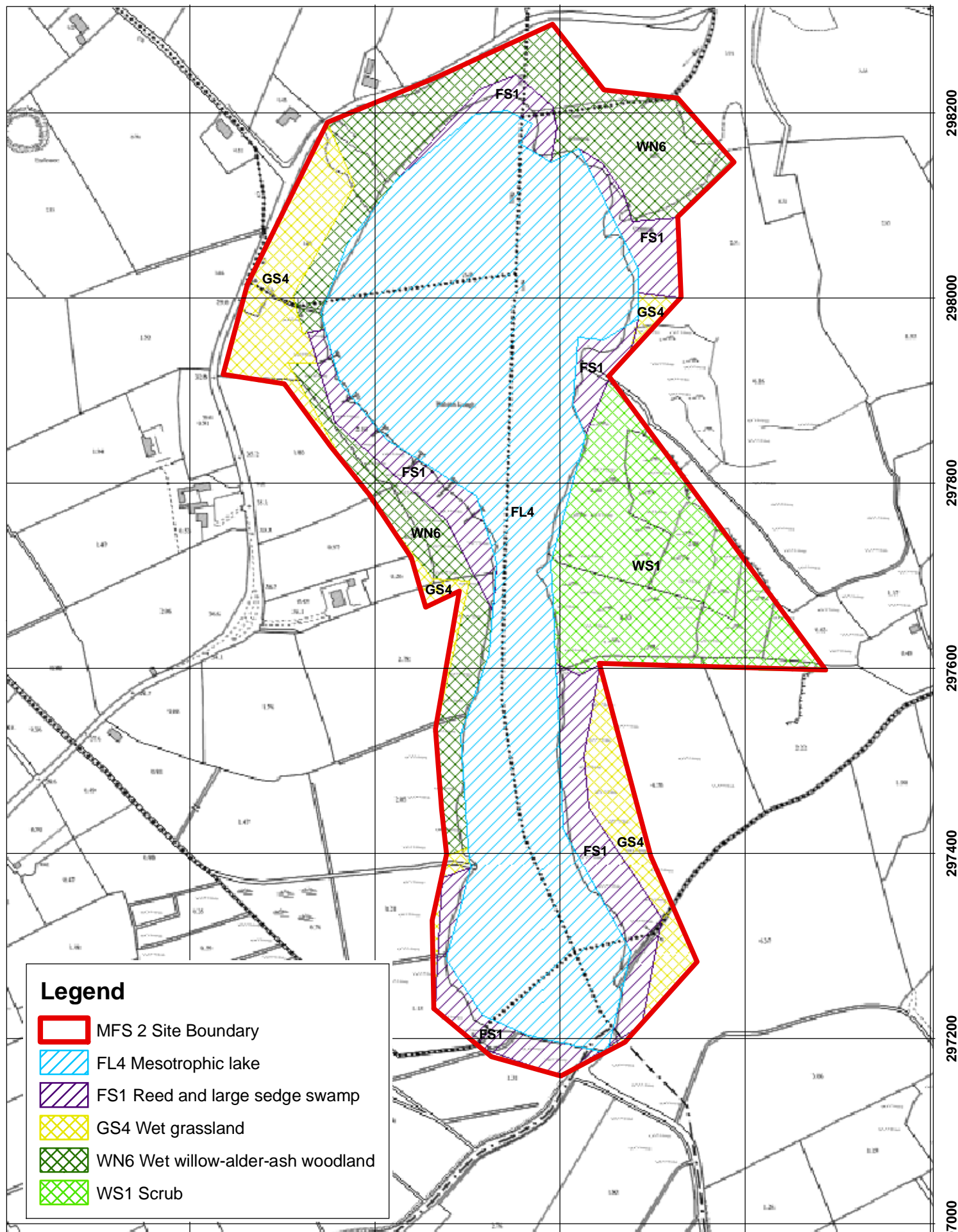
283000

283200

283400

283600

283800



2844 Rahans Lough

0 50 100 200 300 400 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: RATHKEEVAN LOUGH

Site Code: MFS-35

Current Conservaton Designations: Undesignated site

National Grid Reference: H 538 302

County: MO FH

Total Site Area (ha): 1.7

Discovery Grid Ref: 253811 330235

Vice County: H32

6" map No. MO 12

Discovery map No. 28A

Air photograph No. 1153A

NFS Overall Site Results Section

NFS Brief site description

Small inter-drumlin lake with fringing macrophyte and emergent reed vegetation. Wet grassland habitat surrounds the lake.

No fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input checked="" type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

No fen habitats were recorded at the site. However the site lies adjacent to Lislannan Bog proposed NHA (surveyed during Monaghan Fen Survey 2007) to the East adding to the overall interest of this lake site.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

18 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

New NHA site card created

Main Habitats on Site: LAKE, REEDBEDS

Fossitt habitat types present within site based on NFS:

FL4 Mesotrophic lakes
 FS1 Reed and large sedge swamps
 FS2 Tall herb swamps
 FW4 Drainage ditches
 GS4 Wet grassland
 WN6 Wet willow-alder-ash woodland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
☐ Alkaline fen 7230/PF1
☐ Poor fen/PF2
☐ Transition Mire 7140/PF3
☐ Petrifying Spring 7220/FP1
☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
 Alkaline fen 7230
 Poor fens
 Transition Mire 7140
 * Petrifying Springs 7220
 Non Calcareous Springs

Total Fen Area
 (sum of all fen
 areas)

General NFS Results Section**Townland Names:**

CARRICKMORE; DRUMADDARAINY

River Catchment:

River Finn

Solid geology:

Dinantian shales and limestones

Topography:

Inter drumlin hollow site with lake

Quaternary deposits:

Cutover raised bog

Hyrdology:

Outflow towards the south west. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:**Substrate stability:****Altitude Range (m):**

70

Range Peat depth (cm):**Range Water depth (cm):****Water sample number:**

NA

Field pH range:**Field Conductivity range:**

Lake water conductivity 760

Photographic numbers:

DSC 2341-2347 P.Foss (4 images)

NFS Site landuse, impacts, activities and threats**NFS Landuse Within site boundary****Activity**

Grazing - cattle

Scale

1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Grazing - cattle

Roads

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|----------|-----------|-----------|
| None | | |

NFS Site Threats

| Activity | Note Number(s) |
|----------|----------------|
| None | |

NFS Site Description; Notes and Ground Photograph Captions**NFS Site Synopsis with Fen interest description**

Rathkeevan Lough is located 4 km north east of Clones on the border with Northern Ireland.

This mesotrophic lake has a zone of floating macrophytes (Yellow Water-lily (*Nuphar lutea*)) and emergent reeds (with abundant Bulrush (*Typha latifolia*), Common Club-rush (*Schoenoplectus lacustris*) and Common Reed (*Phragmites australis*)) around its margin. Wet grassland dominated by rushes surrounds the lake and grade into the fringing reed communities along the northern shore. A narrow band of Alder (*Alnus glutinosa*) woodland occurs between the reed swamp and wet grassland habitat.

No fen habitats were recorded at the site. However the site lies adjacent to Lislannan Bog proposed NHA (surveyed during Monaghan Fen Survey 2007) to the East adding to the overall interest of this lake site.

NFS Site Notes

N1 Habitat: Wet grassland area with *Juncus effusus*.

N2 Habitat: Reed bed swamp composed mainly of *Typha latifolia* with *Schoenoplectus lacustris* increasing in abundance into the open water of the lake.

Other species recorded: *Phragmites australis*, *Filipendula ulmaria*, *Equisetum fluviatile*, *Menyanthes trifoliata*, *Holcus lanatus*, *Potentilla palustris*, *Galium palustre*, *Mentha aquatica*, *Epilobium hirsutum*, *Cicuta virosa*, *Rumex acetosa*, *Carex rostrata*, *Agrostis stolonifera*.

Nuphar lutea is emergent in the lake.

N3 Habitat: : Wet woodland fringe behind the reed bed swamp with *Salix cinerea* and *Alnus glutinosa*.

NFS Species recorded on site

MFS 2008 Fauna records - Four spotted chaser; Ringlet; Frog; Meadow Brown;

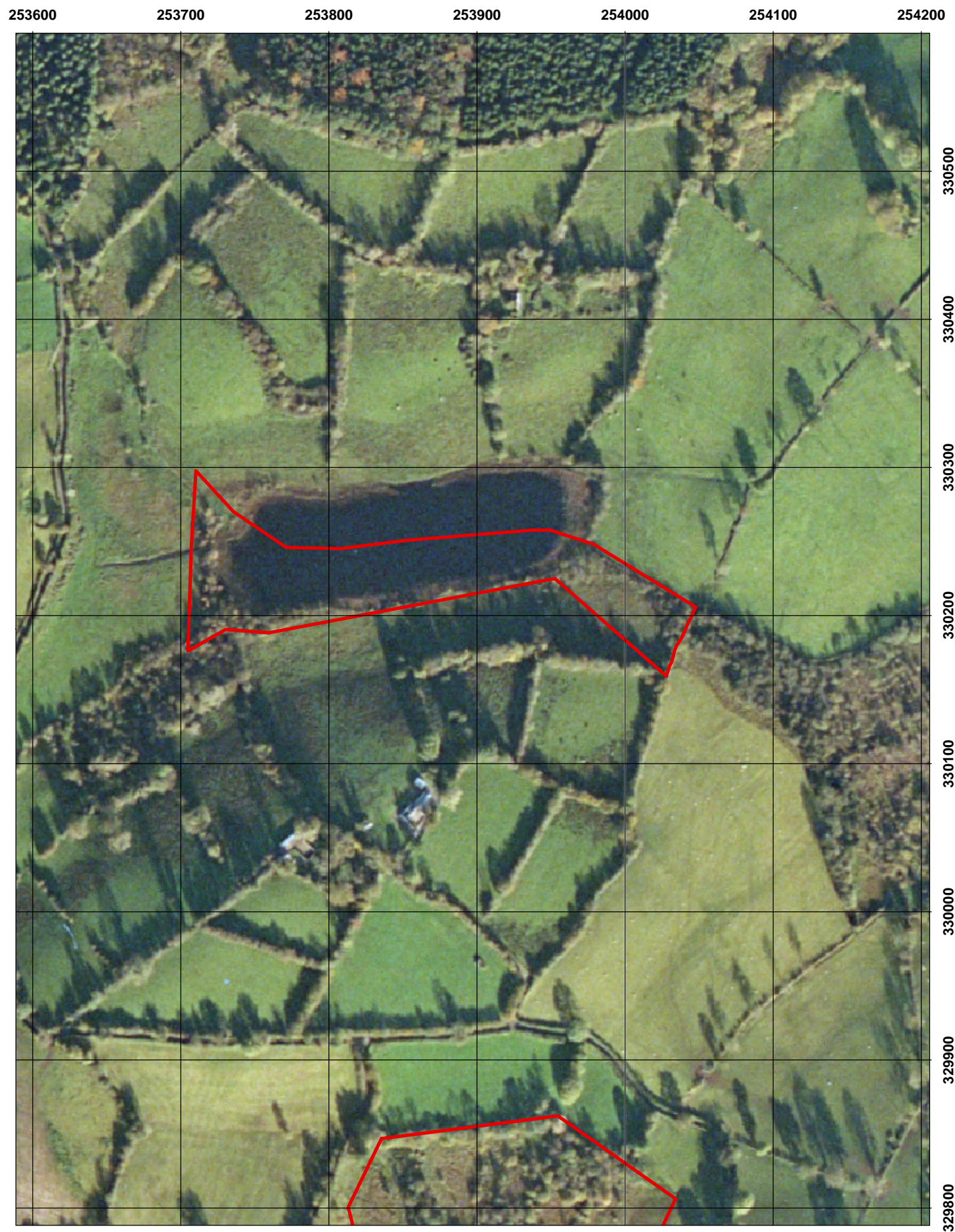
NFS Ground Photographic Notes

DSC 2341: P1 - Western shore of the lake, with *Typha latifolia* reed bed zone with scattered willow and wet grassland in the foreground. View to south-east.

DSC 2343: P2 - Western shore of the lake, with *Typha latifolia* reed bed swamp zone. View to south-east.

DSC 2346: P1 - Western shore of the lake, with *Typha latifolia* reed bed swamp zone. View to east.

DSC 2347: P1 - Western shore of the lake, showing herb layer in the *Typha latifolia* reed bed swamp zone, with Bogbean and *Mentha aquatica*.

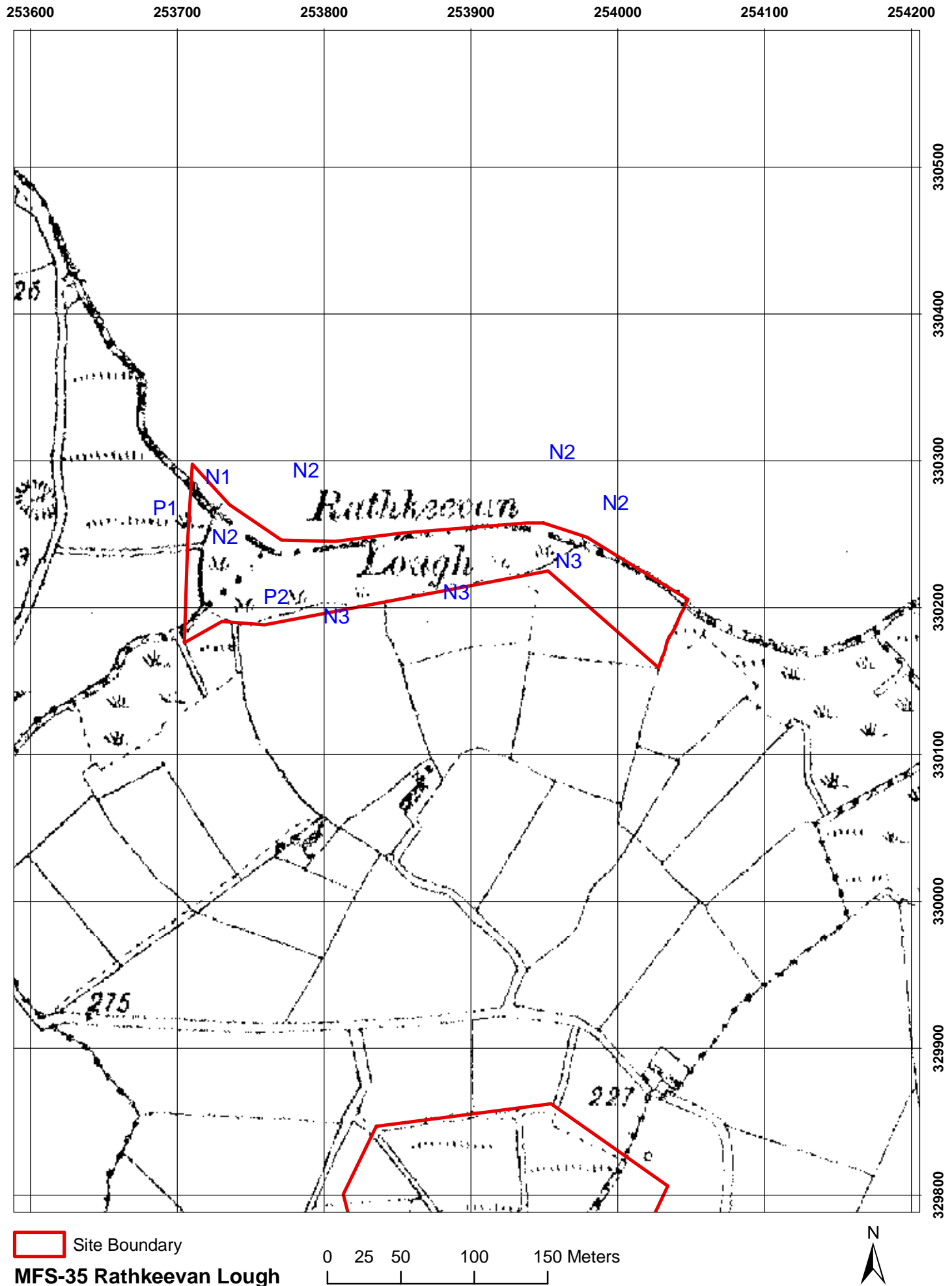


Site Boundary

MFS-35 Rathkeevan Lough

0 25 50 100 150 Meters





253700

253800

253900

254000

330500

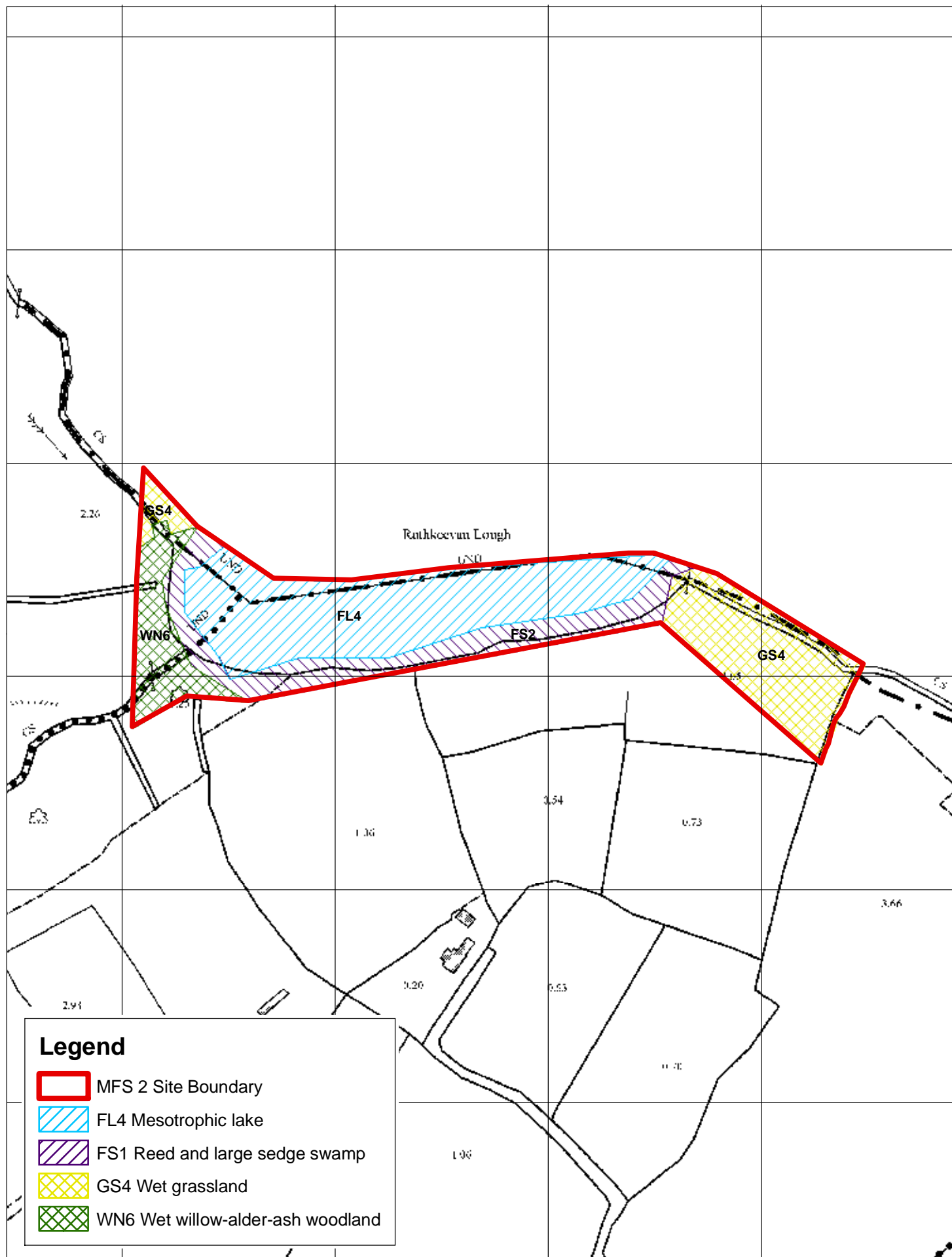
330400

330300

330200

330100

330000



MFS-35 Rathkeevan Lough

0 25 50 100 150 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: ROOSKY LOUGH

Site Code: MFS-36

Current Conservaton Designations: Undesignated site

National Grid Reference: H 571 267

County: MO

Total Site Area (ha): 17.1

Discovery Grid Ref: 257163 326786

Vice County: H32

6" map No. Mo 12

Discovery map No. 28A

Air photograph No. 1215A; 1215C

NFS Overall Site Results Section

NFS Brief site description

An inter-drumlin lake that has been largely terrestrialised by an extensive floating raft of *Typha* dominated tall herb communities. The lake is surrounded by improved pasture.

There is no fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input checked="" type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

Although there are no fen communities on the site, it is of ecological interest due to the diversity of wetland habitats present accompanied by the undisturbed nature of the site. The site is deemed to be of high ecological value.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

18 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

New NHA site card created

Main Habitats on Site: LAKE, REEDBED SWAMP

Fossitt habitat types present within site based on NFS:

- FL4 Mesotrophic lakes
- FS2 Tall herb swamps
- FW1 Eroding/upland rivers
- GA1 Improved agricultural grassland
- GS4 Wet grassland
- WL1 Hedgerows
- WL2 Treelines
- WN6 Wet willow-alder-ash woodland
- WS1 Scrub

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
- ☐ Alkaline fen 7230/PF1
- ☐ Poor fen/PF2
- ☐ Transition Mire 7140/PF3
- ☐ Petrifying Spring 7220/FP1
- ☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
- Alkaline fen 7230
- Poor fens
- Transition Mire 7140
- * Petrifying Springs 7220
- Non Calcareous Springs

Total Fen Area
(sum of all fen areas)

General NFS Results Section

Townland Names:

ROOSKY (Dartree By); AGHNASKEA; EDENAGOASH; DRUMGULLY

River Catchment:

River Magheramey; River Finn

Solid geology:

Ordovician metasediments

Topography:

Inter drumlin hollow site with infilling lake

Quaternary deposits:

Cutover raised bog

Hyrdology:

Inflow from the north west. Outflow via swallow hole at the southern end of lake. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:

Substrate stability:

Altitude Range (m):

89

Range Peat depth (cm):

Range Water depth (cm):

Water sample number:

NA

Field pH range:

Field Conductivity range:

Lake water conductivity 207

Photographic numbers:

DSC 2298-2320 P.Foss (8 images)

NFS Site landuse, impacts, activities and threats

NFS Landuse Within site boundary

Activity

Meadow - silage

Grazing - cattle

Scale

2 Occasional (5-20%)

2 Occasional (5-20%)

NFS Surrounding Landuse - Outside site boundary

Meadow - silage
Grazing - cattle
Residential (scattered)
Roads

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|--------------------------------------|------------|------------------------------------|
| 951 accumulation of organic material | B = medium | - 1 = reparable negative influence |

NFS Site Threats

| Activity | Note Number(s) |
|-------------------|----------------|
| 120 Fertilisation | N5 |

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Roosky Lough is located 3 km due north of Newbliss.

An inter-drumlin lake with an extensive terrestrialsing raft with an open tall herb community dominated by Bulrush (*Typha latifolia*), there is a good diversity of wetland flora present throughout the raft. This floating raft is very thin and has not developed sufficiently to enable safe access. Scattered Grey Willow (*Salix cinerea*) and Alder (*Alnus glutinosa*) occur across the raft.

The lake now appears as two separate water bodies due to the development of a floating raft across the narrowest section of the lake.

The southern section is mostly terrestrialsed while much of the northern section retains open water. Floating macrophytes occur across much of the open water habitat throughout the lake. A small stand of wet woodland occurs in the north-western edge of the lake.

At the southern end of the lake, water exits via a swallow hole disappearing underground. The surrounding land-use is intensive agriculture on improved pasture.

No fen habitats were recorded at the site.

NFS Site Notes

N1 Habitat: Tree line forming large hedgerow border along lakeshore. Species present: Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*) and Hawthorn (*Crataegus monogyna*).

N2 Habitat: *Typha latifolia* reed and tall herb swamp forming a quaking mat, is infilling most of the lake with scattered Willow and Alder bushes.

Species in the tall herb swamp include: *Typha latifolia*, *Ranunculus lingua*, *Angelica sylvestris*, *Scrophularia nodosa*, *Juncus effusus*, *Menyanthes trifoliata*, *Mentha aquatica*, *Cicuta virosa*, *Equisetum fluviatile*, *Polygonum amphibium*, *Eleocharis palustris*, *Lotus uliginosus*, *Lythrum salicaria*, *Alisma plantago aquatica*, *Holcus lanatus*, *Schoenoplectus lacustris*, *Cirsium palustre*, *Epilobium hirsutum*, *Glyceria fluitans*, *Oenanthe* spp., *Myosotis laxa*, *Carex rostrata*, *Lemna minor*, *L. trisulca*, *Hydrocotyle vulgaris*, *Potamogeton natans*, *Phalaris arundinacea*.

In the open water area of the lakes, a floating layer of *Nuphar lutea* and *Potamogeton* spp. forms an almost continuous layer over the water surface.

N3 Habitat: Small Gorse scrub area.

N4 Habitat: Wet woodland area with *Salix cinerea* and *Alnus glutinosa*.

N5 Habitat: Improved agricultural grassland.

NFS Species recorded on site

MFS 2008 Fauna records - Mute Swans (8); Heron (2); Frog (10+); Green Veined white (2);

NFS Ground Photographic Notes

DSC 2298: P1 - Southern shore of the lake, with Typha latifolia reed bed swamp zone. View to north.

DSC 2301: P2 - Southern shore of the lake, where a swallow hole takes the water outflow from the lake.

DSC 2305: P1 - Southern shore of the lake, with Typha latifolia reed bed swamp zone.

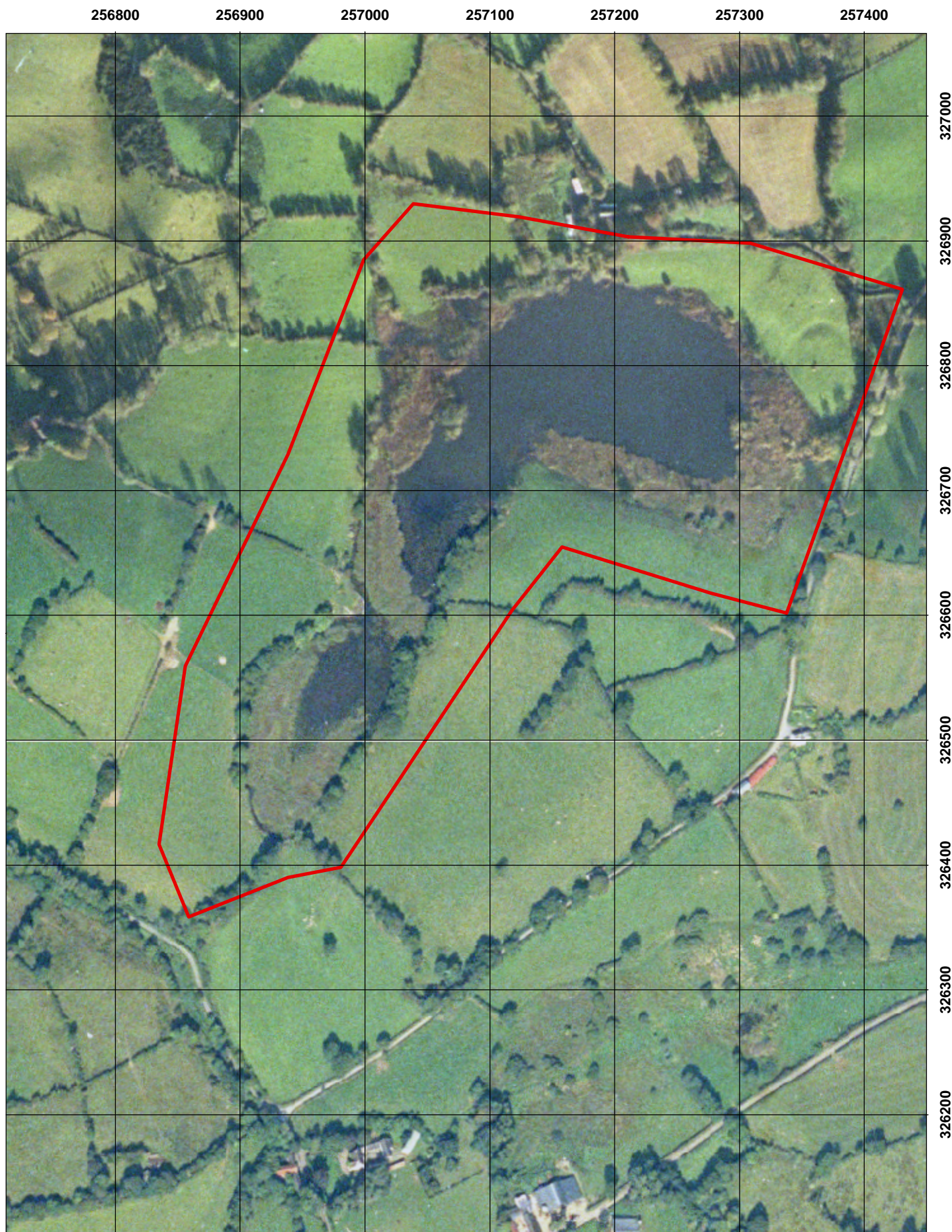
DSC 2306: P3 - Southern shore of the lake, with Typha latifolia reed bed swamp zone. View to north.

DSC 2316: P4 - North eastern shore of the lake, with Typha latifolia reed bed swamp zone. View to north-east.

DSC 2317: P4 - North eastern shore of the lake, with Typha latifolia reed bed swamp zone. View to north.

DSC 2319: P4 - North eastern shore of the lake, with Typha latifolia reed bed swamp zone. View to north.

DSC 2320: P5 - North western shore of the lake, with Typha latifolia reed bed swamp zone, and a wooded Crannog in the distance. View to west.

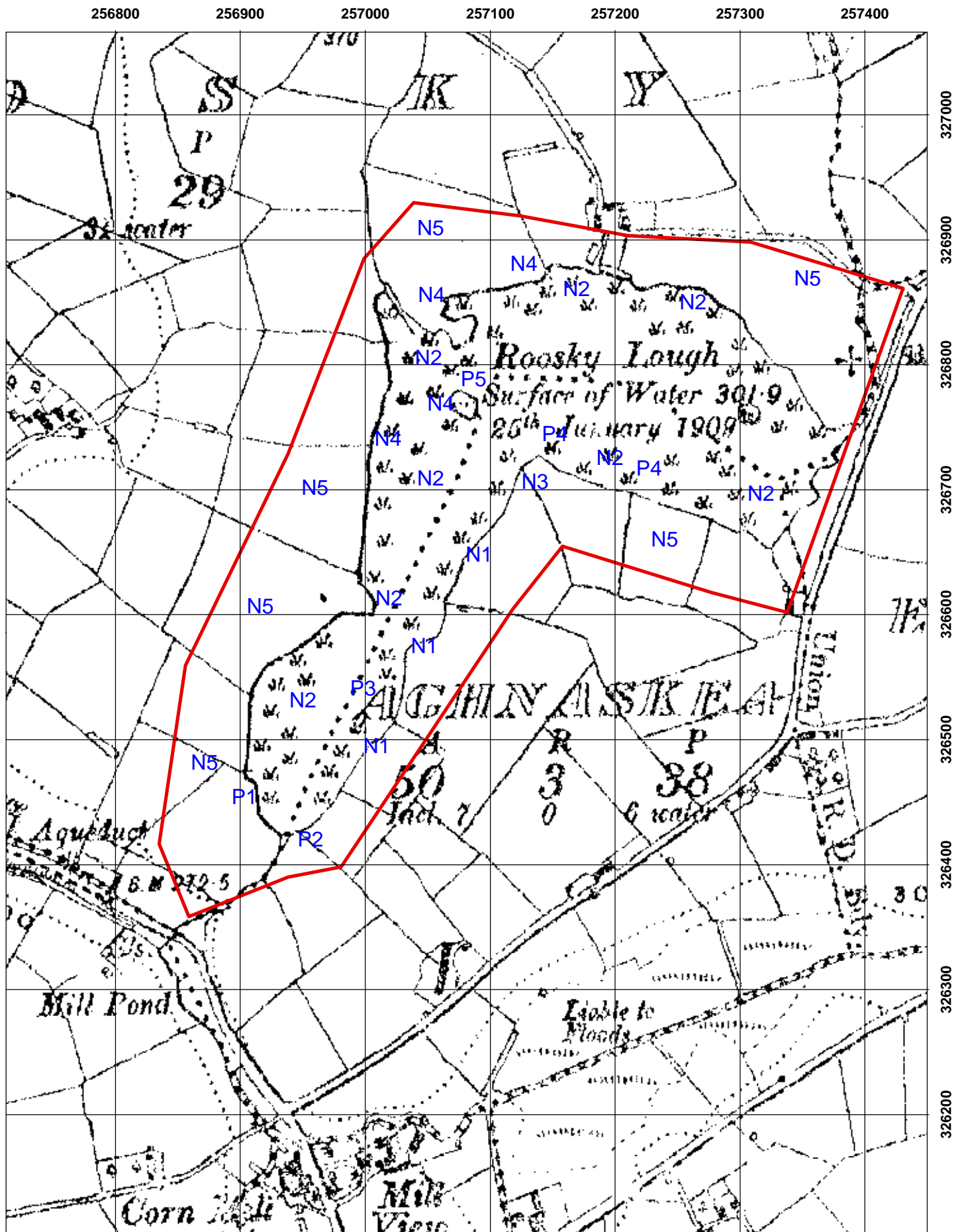


 Site Boundary

MFS-36 Roosky Lough

0 50 100 200 300 Meters





Site Boundary

MFS-36 Roosky Lough

0 50 100 200 300 Meters



256800

256900

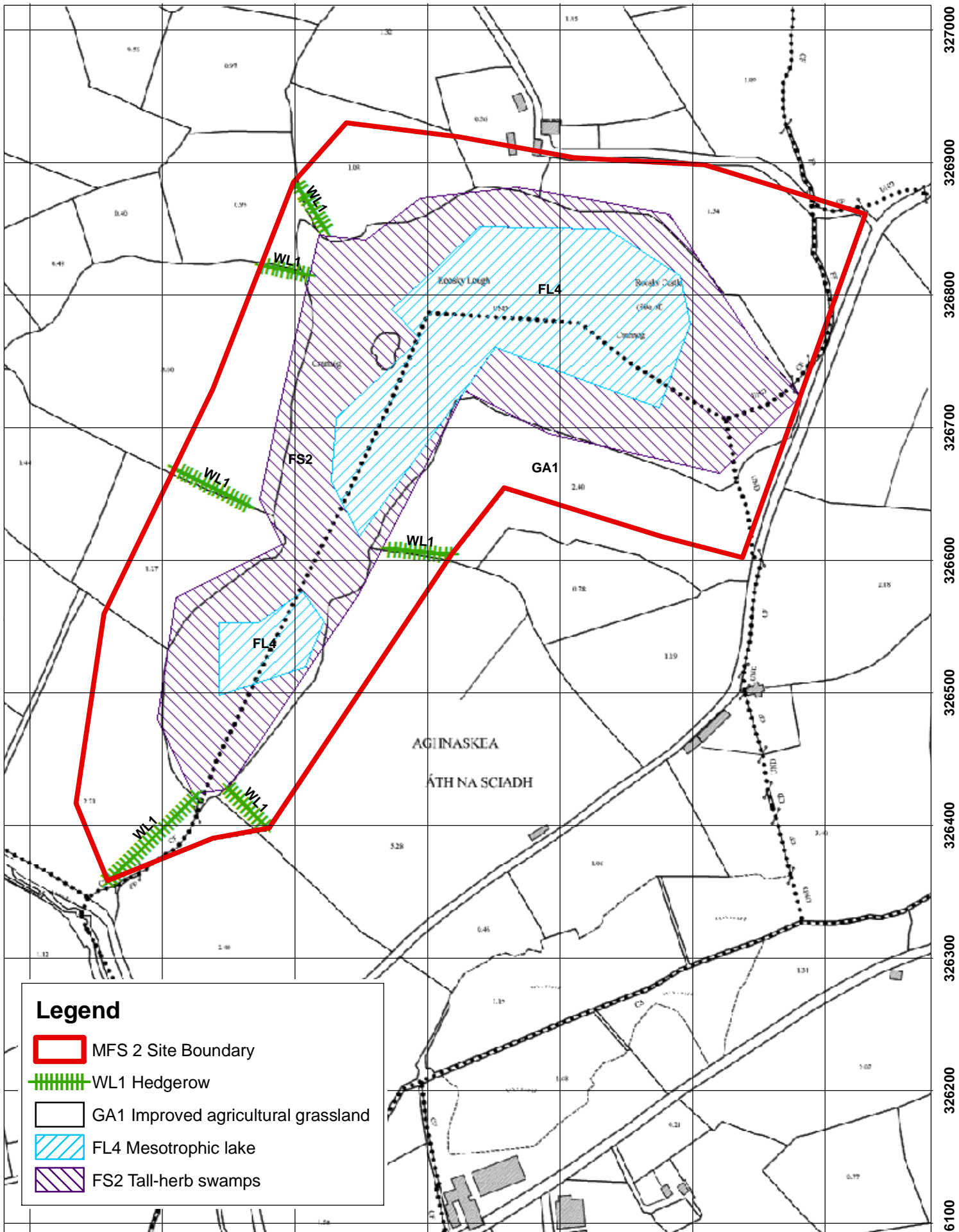
257000

257100

257200

257300

257400



Legend

- MFS 2 Site Boundary
- WL1 Hedgerow
- GA1 Improved agricultural grassland
- FL4 Mesotrophic lake
- FS2 Tall-herb swamps

MFS-36 Roosky Lough

0 25 50 100 150 200 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: SHANTONAGH LOUGH

Site Code: MFS-37

Current Conservaton Designations: Undesignated site

National Grid Reference: H 756 106

County: MO

Total Site Area (ha): 45.8

Discovery Grid Ref: 275694 310649

Vice County: H32

6" map No.

Discovery map No. 28B

Air photograph No. 1556D; 1557C

NFS Overall Site Results Section

NFS Brief site description

Large inter-drumlin lake with fringing reed communities on the south-western and north-eastern shores. Elsewhere improved grassland extends to the rocky lake edge.

There is no fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input checked="" type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The site is deemed to be of moderate ecological value due to the presence of the large lake.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

16 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Main Habitats on Site: LAKE, WET WOODLAND

Fossitt habitat types present within site based on NFS:

ER1 Exposed siliceous rock
 FL4 Mesotrophic lakes
 FS1 Reed and large sedge swamps
 FW1 Eroding/upland rivers
 FW4 Drainage ditches
 GA1 Improved agricultural grassland
 GS4 Wet grassland
 WL1 Hedgerows
 WN6 Wet willow-alder-ash woodland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
☐ Alkaline fen 7230/PF1
☐ Poor fen/PF2
☐ Transition Mire 7140/PF3
☐ Petrifying Spring 7220/FP1
☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
 Alkaline fen 7230
 Poor fens
 Transition Mire 7140
 * Petrifying Springs 7220
 Non Calcareous Springs

Total Fen Area
(sum of all fen areas)**General NFS Results Section****Townland Names:**

TULLYRAIN; SHANTONAGH (ED Bellatrain); TULLYGLASS;
 CORAGHY (Farney By); TOOA; LISACULLION

River Catchment:

Knappagh Water; River Analee

Solid geology:

Silurian metasediments and volcanics

Topography:

Inter drumlin hollow site with large lake

Quaternary deposits:

Cutover raised bog

Hyrdology:

Inflow and outflow are at the south western corner of the lake.
 Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:**Substrate stability:****Altitude Range (m):**

107

Range Peat depth (cm):**Range Water depth (cm):****Water sample number:**

NA

Field pH range:**Field Conductivity range:****Photographic numbers:**

DSC 2174-2178 P.Foss (4 images)

NFS Site landuse, impacts, activities and threats**NFS Landuse Within site boundary****Activity**

Meadow - use unknown

Grazing - cattle

Scale

1 Rare (<5%)

1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Grazing - cattle
Meadow - silage
Residential (scattered)
Roads

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|----------|-----------|-----------|
| None | | |

NFS Site Threats

| Activity | Note Number(s) |
|----------|----------------|
| None | |

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Shantonagh Lough is located 5 km north east of Shercock, and 1 km east of the R181 road to Castleblaney.

The main interest of this site lies in the large mesotrophic lake and its likely value to wildfowl. There are few wetland areas associated with the lake apart from the sparse stands of Common Reed (*Phragmites australis*) and Common Club-rush (*Schoenoplectus lacustris*) in the emergent zone along the lake margin.

Extensive Common Reed (*Phragmites australis*) swamp occurs in the more sheltered north-eastern (grading into wet woodland) and south-western corners of the lake. Elsewhere the improved pasture which surrounds the site extends to the lake shore.

The fields to the south of the lake contain wet grassland dominated by Soft Rush (*Juncus effusus*).

No fen habitats were recorded at the site.

NFS Site Notes

N1 Habitat: Rocky lake shore area with steep drumlins adjacent. Little marginal vegetation with only scattered patches of *Phragmites australis* and *Schoenoplectus lacustris* usually located in small bays and inlets on lakeshore.

N2 Habitat: Wet willow alder woodland.

N3 Habitat: *Phragmites australis* reed bed.

N4 Habitat: *Nuphar lutea* floating communities.

N5 Habitat: Wet *Juncus effusus* grassland.

NFS Species recorded on site

MFS 2008 Fauna records - Grebe (2)

NFS Ground Photographic Notes

DSC 2174: P1 - Northern shore of the lake, with wet wooded zone. View to south.

DSC 2176: P2 - Southern shore of the lake, with wet wooded zone in foreground. The remaining lakeshore was dominated by rocky outcrops and a minimal wetland marginal zone adjacent to the improved

grassland. View to north-west.

DSC 2177: P2 - Southern shore of the lake, with wet wooded zone in foreground. The remaining lakeshore was dominated by rocky outcrops and a minimal wetland marginal zone adjacent to the improved grassland. View to north.

DSC 2178: P2 - Southern shore of the lake, with wet wooded zone in foreground. The remaining lakeshore was dominated by rocky outcrops and a minimal wetland marginal zone adjacent to the improved grassland. View to north-east.

275200

275400

275600

275800

276000

276200

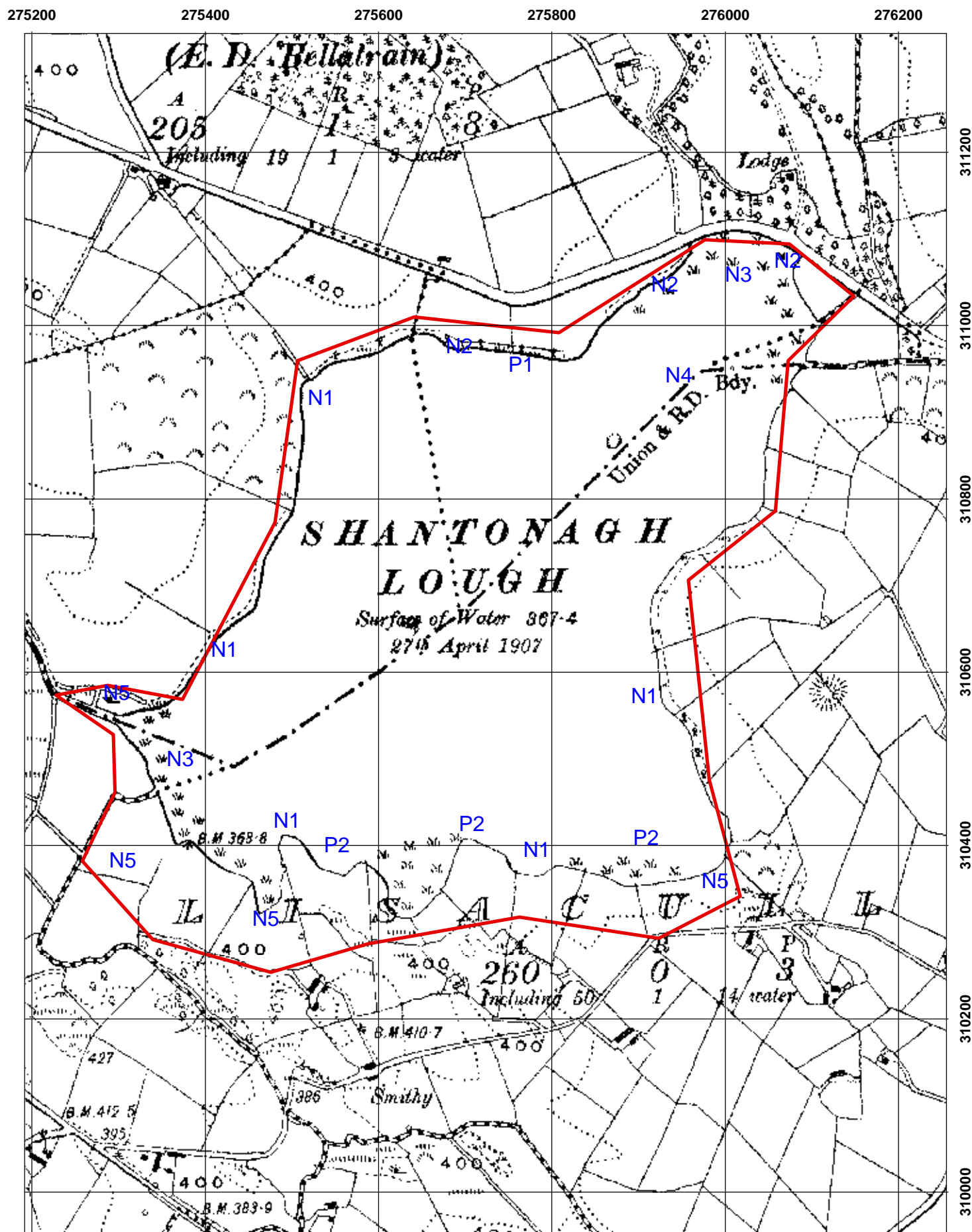


 Site Boundary

MFS-37 Shantonagh Lough

0 25 50 100 150 Meters





Site Boundary

0 25 50 100 150 Meters

MFS-37 Shantonagh Lough



275200

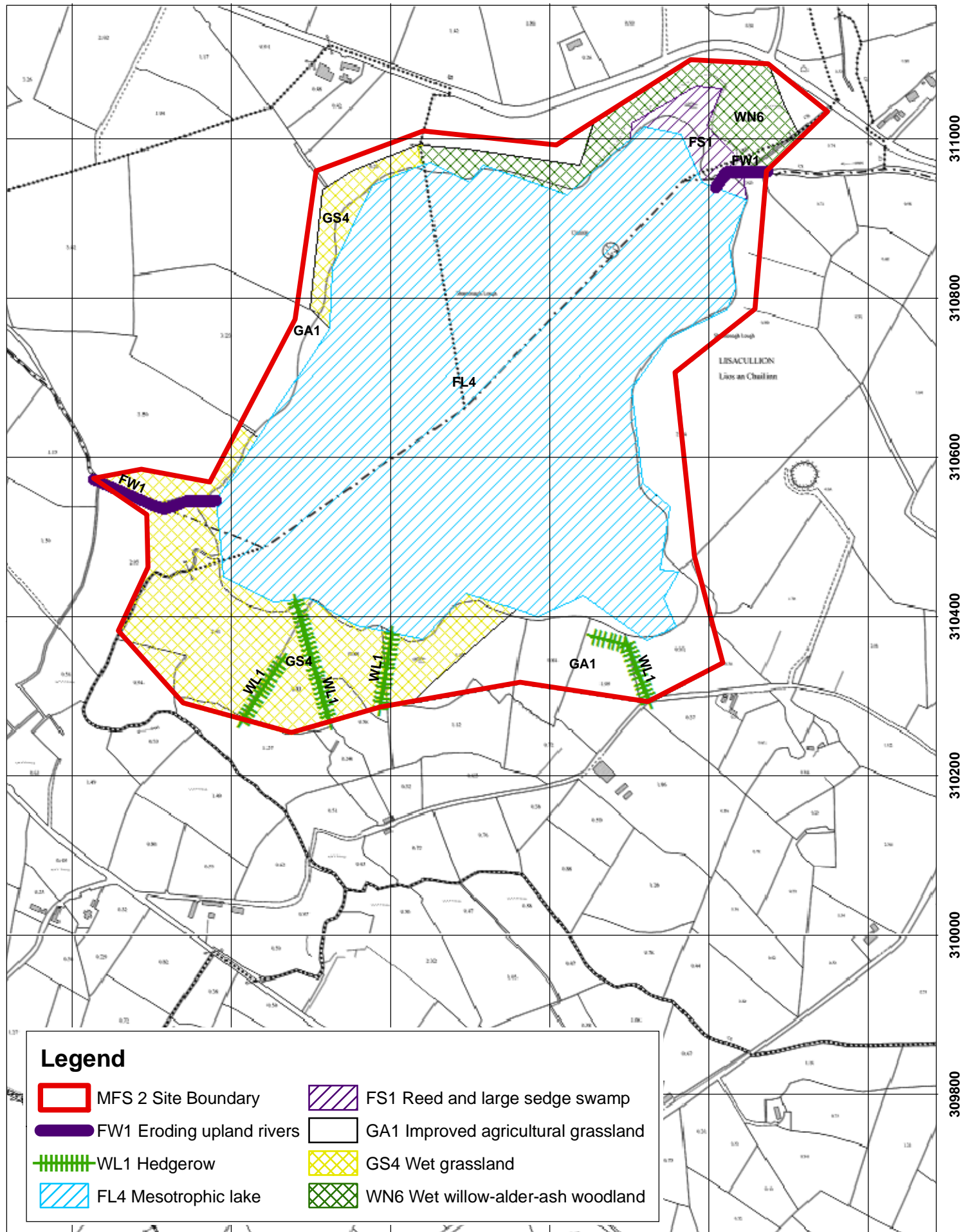
275400

275600

275800

276000

276200



MFS-37 Shantonagh Lough

0 50 100 200 300 400 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: SILLIS LOUGH

Site Code: MFS-38

Current Conservaton Designations: Undesignated site

National Grid Reference: H 732 398

County: MO

Total Site Area (ha): 7.3

Discovery Grid Ref: 273237 339807

Vice County: H32

6" map No. MO 7

Discovery map No. 28B

Air photograph No. 0979A

NFS Overall Site Results Section

NFS Brief site description

A small inter-drumlin mesotrophic lake with a margin of floating macrophytes and emergent reed communities. The western part of the lake has been terrestrialised by a floating raft of tall herb communities.

There is no fen interest at this site.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input checked="" type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

The site is deemed to be of low to moderate ecological value due to the presence of a small lake and associated wetland communities.

Fen Survey Conservation Recommendations based on NFS

Reduction in the intensity of agricultural practices around the site should be considered.

NFS Date of Survey:

15 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Main Habitats on Site: LAKE, REEDBEDS

Fossitt habitat types present within site based on NFS:

FL4 Mesotrophic lakes
 FS1 Reed and large sedge swamps
 FS2 Tall herb swamps
 FW4 Drainage ditches
 GA1 Improved agricultural grassland
 GS4 Wet grassland
 WL1 Hedgerows
 WN6 Wet willow-alder-ash woodland

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
☐ Alkaline fen 7230/PF1
☐ Poor fen/PF2
☐ Transition Mire 7140/PF3
☐ Petrifying Spring 7220/FP1
☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
 Alkaline fen 7230
 Poor fens
 Transition Mire 7140
 * Petrifying Springs 7220
 Non Calcareous Springs

Total Fen Area
(sum of all fen areas)**General NFS Results Section****Townland Names:**

SILLIS; BELLANAMAN; MULLANLARRY

River Catchment:

Mountain Water

Solid geology:

Dinantian shales and limestones

Topography:

Inter drumlin hollow site with small lake

Quaternary deposits:

Cutover raised bog

Hyrdology:

Inflow from west, outflow to the east. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

NA

Substrate type:**Substrate stability:****Altitude Range (m):**

33

Range Peat depth (cm):**Range Water depth (cm):****Water sample number:**

NA

Field pH range:**Field Conductivity range:****Photographic numbers:**

DSC 2049-2062 P.Foss (3 images)

NFS Site landuse, impacts, activities and threats**NFS Landuse Within site boundary****Activity**

Meadow - silage

Grazing - cattle

Scale

1 Rare (<5%)

1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Grazing - Cattle
Meadow - silage
Residential (scattered)
Roads
Agricultural building

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

| Activity | Intensity | Influence |
|-------------------|------------|-----------|
| 810 Drainage | C = low | Unknown |
| 120 Fertilisation | B = medium | Unknown |

NFS Site Threats

| Activity | Note Number(s) |
|-------------------|----------------|
| 120 Fertilisation | N5 |

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Sillis Lough is located 5 km north east west of Monaghan town, midway between the N2 and R185 roads.

The western end of the site is a terrestrialised former lake with tall herb swamp vegetation dominated by Common Reed (*Phragmites australis*), Bulrush (*Typha latifolia*) and Branched Bur-reed (*Sparganium erectum*). To the east this tall herb swamp is connected to the main lake by a large drainage ditch.

Floating macrophytes (Yellow Water-lily (*Nuphar lutea*) and White Water-lily (*Nymphaea alba*)) occur on the open water and give way to Common Club-rush (*Schoenoplectus lacustris*) and dense stands of Common Reed (*Phragmites australis*) at the shore. An area of well developed wet woodland with Grey Willow (*Salix cinerea*) and Alder (*Alnus glutinosa*) occurs in the northern part of the site while to the east of the lake a small area of Brown Sedge (*Carex acutiformis*) marsh grades into the surrounding improved pasture which is grazed by sheep.

No fen habitats were recorded at the site.

NFS Site Notes

N1 Habitat: Tall herb swamp area at western end of site surrounded by a narrow fringe of willow scrub.

Species present include: *Phragmites australis* (tallest grass but with a sparse open growth form), *Menyanthes trifoliata*, *Potentilla anserina*, *Lathyrus montanus*, *Galium palustre*, *Angelica sylvestris*, *Salix cinerea*, *Filipendula ulmaria*, *Alnus glutinosa*, *Holcus lanatus*, *Mentha aquatica*, *Rhinanthus minor*, *Lycopus europaeus*, *Myosotis laxa*, *Equisetum fluviatile*, *Carex rostrata*, *Oenanthe spp.*, *Typha latifolia*, *Sparganium erectum*.

N2 Drainage: Drainage channel with sparse willow cover extending to Sillis Lough in the east.

N3 Habitat: Dense stands of *Phragmites australis* surround much of the lakeshore.

N4 Habitat: On the western shore of the lake behind the *Phragmites* reed bed there is an area of *Carex acutiformis* tall herb swamp.

N5 Habitat: Improved agricultural grassland.

NFS Species recorded on site

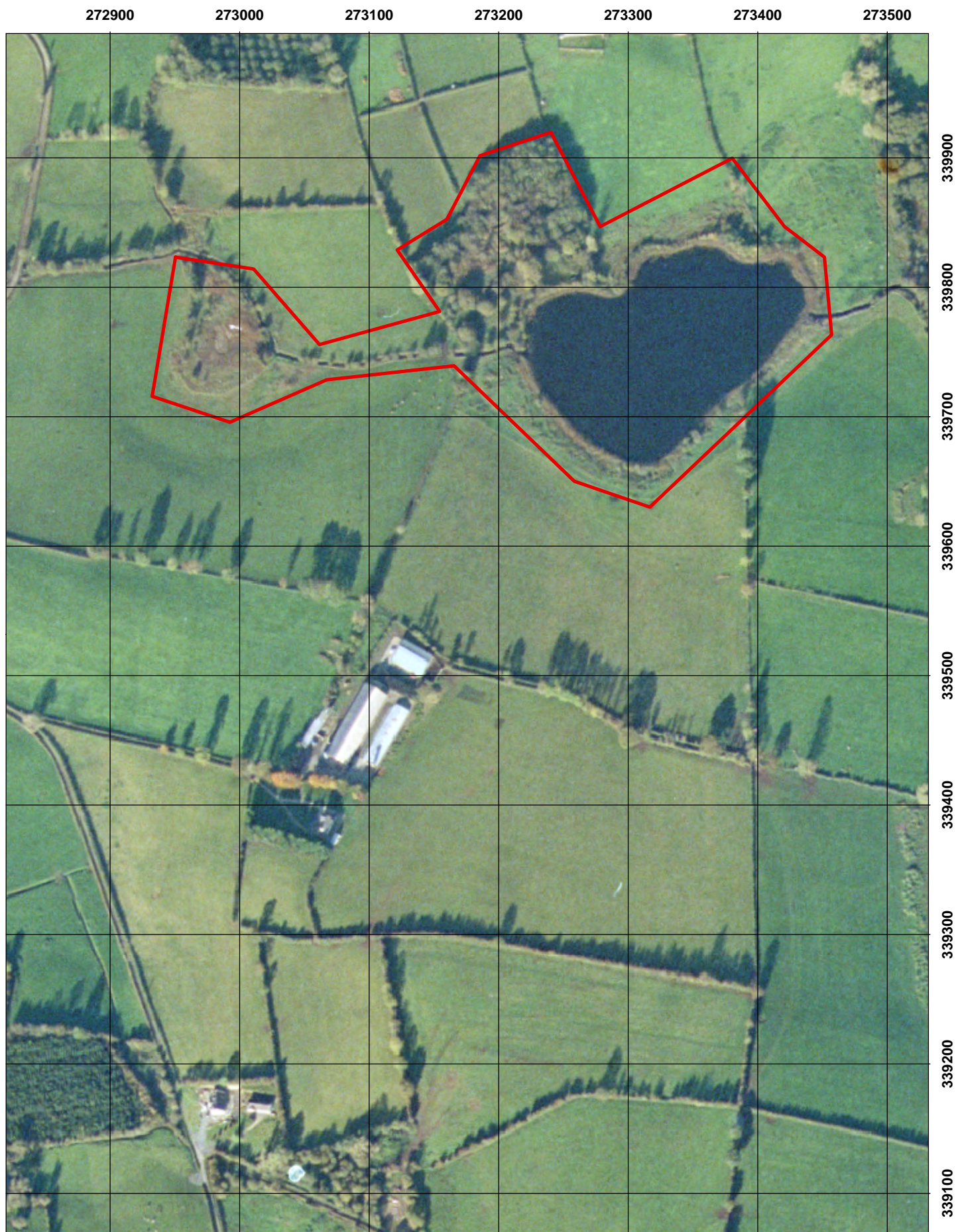
MFS 2008 Fauna records - Meadow Brown (3); Speckled Wood (1); Ringlet (1)

NFS Ground Photographic Notes

DSC 2049: P1 - *Phragmites australis* tall herb swamp area in the west of the site. View to north.

DSC 2059: P2 - *Carex acutiformis* tall herb swamp area in the east of the site, with reed bed zone around the shore of the lake. View to south-west.

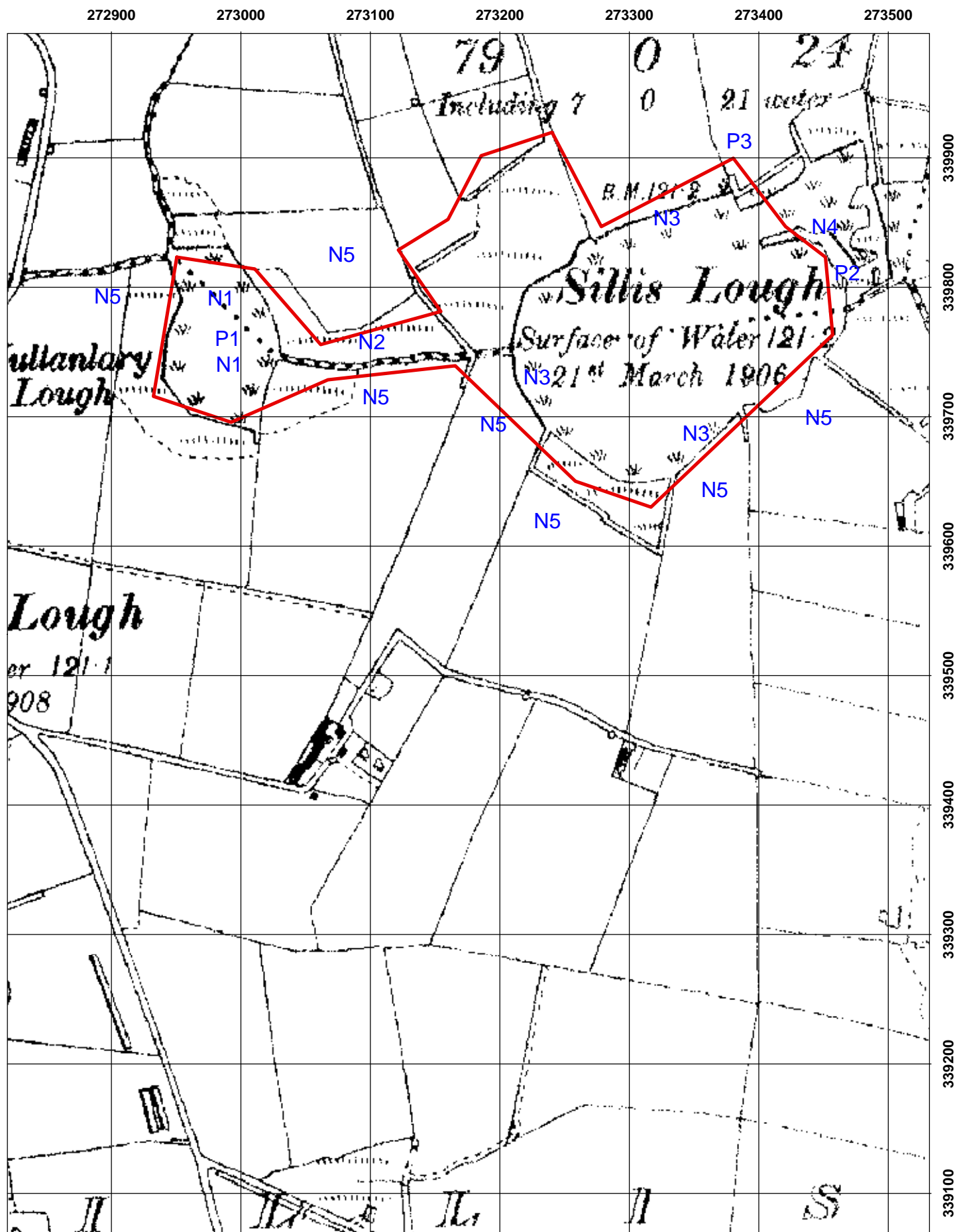
DSC 2062: P3 - General view of Sillis Lough looking westwards, with reed bed zone surround most of the shore of the lake.



Site Boundary
MFS-38 Sillis Lough

0 25 50 100 150 Meters





 Site Boundary
MFS-38 Sillis Lough

0 25 50 100 150 Meters



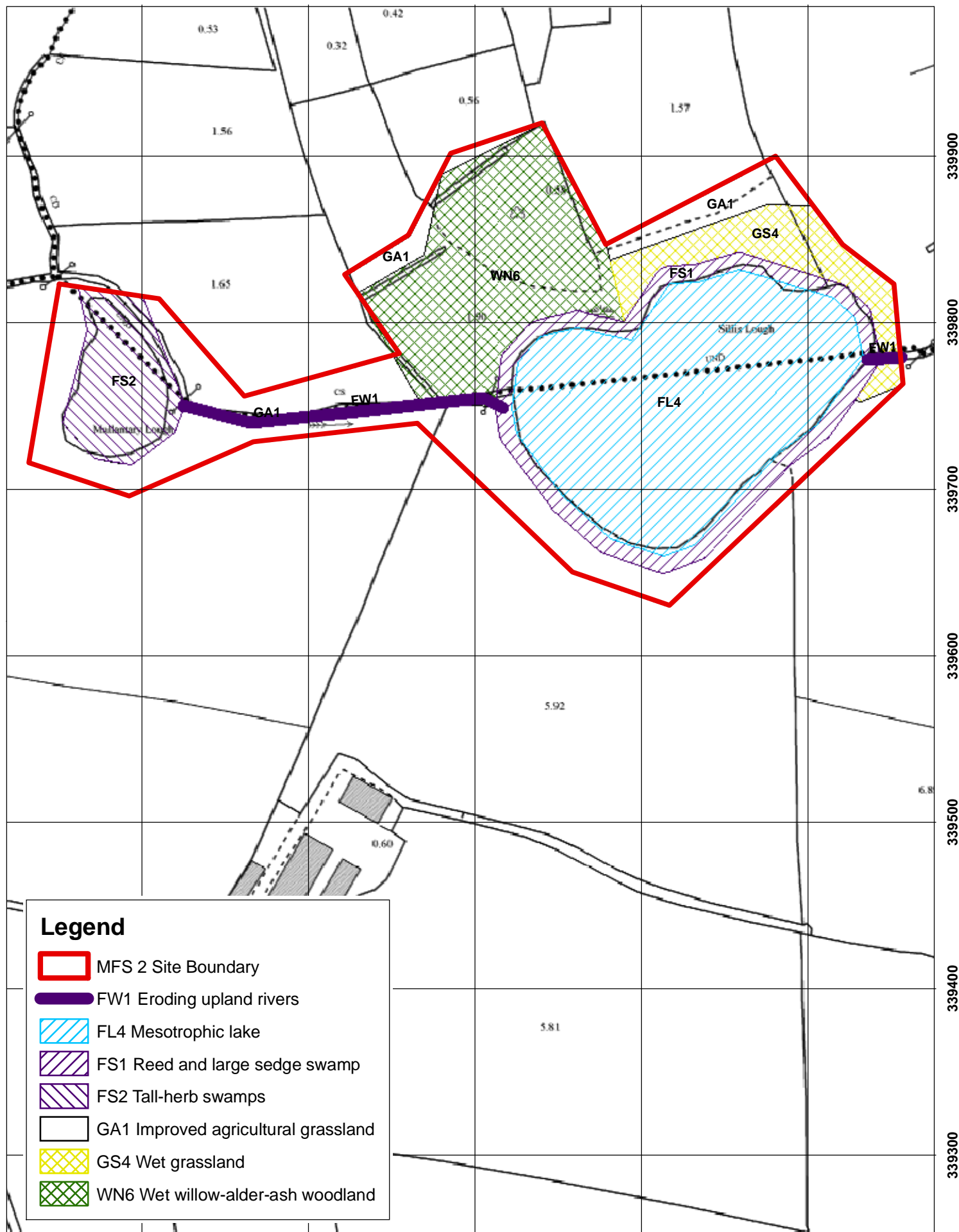
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MFS-38 Sillis Lough

0 25 50 100 150 200 Meters



National Fen Survey of Ireland Database - Site Synopsis

Site Name: TASSAN LOUGH

Site Code: 001666

Current Conservaton Designations: pNHA

National Grid Reference: H 794 261

County: MO

Total Site Area (ha): 6

Discovery Grid Ref: 279406 326177

Vice County: H32

6" map No.

Discovery map No. 28B

Air photograph No. 1220D

NFS Overall Site Results Section

NFS Brief site description

A small wetland site comprising a mesotrophic lake, reed swamp and transition mire. Dry heath communities occur to the east of the lake on rocky substrates.

Site conservation evaluation based on NFS

- | | |
|---|--|
| <input type="checkbox"/> A Rating: Recommended for SAC status (International) | <input type="checkbox"/> C Rating: High local conservation value |
| <input checked="" type="checkbox"/> B Rating: Recommended for NHA status (National) | <input type="checkbox"/> D Rating: Moderate local conservation value |
| <input type="checkbox"/> C + Rating: County conservation value | <input type="checkbox"/> E Rating: Low local conservation value |

Fen Survey evaluation based on NFS

In summary the proposed NHA is of considerable conservation interest despite its small size. The diversity of habitats and vegetation is of interest along with the presence of fen vegetation. The site is deemed to be of high ecological value.

Fen Survey Conservation Recommendations based on NFS

None

NFS Date of Survey:

17 July 2008

NFS Surveyor Names:

Peter Foss & Patrick Crushell

NFS Survey Data Summary:

Detailed site survey (NFS) undertaken

Releve data collected

New NHA site card created

Water chemistry samples collected

NHA Ranger Survey exists

Main Habitats on Site: LAKE, TRANSITION MIRE, HEATHLAND, REEDBEDS

Fossitt habitat types present within site based on NFS:

- BL1 Stone walls and other stonework
- ED2 Spoil and bare ground
- FL4 Mesotrophic lakes
- FS1 Reed and large sedge swamps
- FW4 Drainage ditches
- GS3 Dry-humid acid grassland
- GS4 Wet grassland
- HD Dense Bracken
- HH1 Dry siliceous heath
- PB4 Cutover bog
- PF3 Transition mire & quaking bog
- WL1 Hedgerows
- WS1 Scrub

NFS Fen Habitat Type(s) on site:

- ☐ Cladium fen 7210/PF1
- ☐ Alkaline fen 7230/PF1
- ☐ Poor fen/PF2
- ☒ Transition Mire 7140/PF3
- ☐ Petrifying Spring 7220/FP1
- ☐ Non calcareous spring/FP2

NFS Fen Habitat Extent on site (ha):

- * Cladium Fen 7210
- Alkaline fen 7230
- Poor fens
- Transition Mire 7140 .56
- * Petrifying Springs 7220
- Non Calcareous Springs

Total Fen Area
(sum of all fen areas)

.56

General NFS Results Section

Townland Names:

CROAGHAN; TASSAN

River Catchment:

Lough Muckno; River Fane

Solid geology:

Silurian metasediments and volcanics

Topography:

Inter drumlin hollow site with small lake, abandoned mine spoil heaps

Quaternary deposits:

Cutover raised bog; Rock

Hyrdology:

No obvious nflow or outflow from lake. Site receives surface runoff from surrounding higher drumlins.

Corine Landcover:

231 Pastures

Releve numbers:

1666/ R1 & R2

Substrate type:

Peat

Substrate stability:

Firm

Altitude Range (m):

134

Range Peat depth (cm):

200

Range Water depth (cm):

-10 to -25

Water sample number:

1666/W1 & W2

Field pH range:

Field Conductivity range:

R1 163; R2 190

Photographic numbers:

DSC 2231-2588 P.Foss (9 images); 6684 P. Crushell (1

NFS Site landuse, impacts, activities and threats

NFS Landuse Within site boundary

Activity

Grazing - cattle
Quarrying/Mining

Scale

2 Occasional (5-20%)
1 Rare (<5%)

NFS Surrounding Landuse - Outside site boundary

Grazing - cattle
Roads
Quarrying/Mining
Meadow - use unknown

NFS Impact & Activities Influencing Conservation Status of Site

Intensity of the influence of an activity is rated as A = high, B = medium, C = low influence and D unknown.

Impact is rated as -2 = irreparable negative influence, -1 = reparable negative influence, 0 = neutral, +1 = natural positive influence and +2 = strongly managed positive influence.

Activity

140 Grazing

Intensity

C = low

Influence

- 1 = reparable negative influence

NFS Site Threats

Activity

None

Note Number(s)

NFS Site Description; Notes and Ground Photograph Captions

NFS Site Synopsis with Fen interest description

Tassan Lough is located 6 km north west of Castleblaney, on the N2 road to Monaghan town, and some 2 km east of the Annayalla crossroads.

This small site comprises an inter-drumlin lake, reed swamp, transition mire, poor fen and dry heath on rocky substrate.

The small lake has a floating macrophyte zone around much of the lake edge. The lake shore has fringing reed community of dense Common Reed (*Phragmites australis*). At the immediate lake edge species that are present include Water-plantain (*Alisma plantago aquatica*), Bottle Sedge (*Carex rostrata*), Bogbean (*Menyanthes trifoliata*), Common Cotton-grass (*Eriophorum angustifolium*) and Wild Angelica (*Angelica sylvestris*).

Dense Common Reed (*Phragmites australis*) reed swamp extends from the lake edge to the north and south-west. Old mine spoil heaps with sparse vegetation occur to the west of the lake. To the south of the lake is a small transition mire area and adjacent poor fen. Remnant bog vegetation indicates that the area was cut for peat in the past.

The fen area is very restricted in extent and is actively grazed by cattle, locally causing poaching of the vegetation. To the east of the fen habitats is an interesting although restricted area of dry heath that has developed on rocky substrates.

Semi-improved grassland surrounds the site.

In summary the proposed NHA is of considerable conservation interest despite its small size. The diversity of habitats and vegetation is of interest along with the presence of fen vegetation.

NFS Site Notes

N1 Habitat: Species rich semi-improved area of grassland, with mature hedgerows and stone wall forming boundary with the public road along the eastern side of the site.

Grassland species include: *Juncus effusus*, *Rumex sanguineus*, *Holcus lanatus*, *Trifolium repens*, *Cirsium arvense*, *Plantago lanceolata*, *Cynosurus cristatus*, *Ranunculus repens*, *Prunella vulgaris*, *Agrostis canina*, *Lolium perenne*, *Anthoxanthum odoratum*, *Cirsium palustre*, *Dactylis glomerata*, *Galium aparine*, *Cerastium fontanum*.

Hedgerow species include: *Crataegus monogyna*, *Fraxinus excelsior*, *Prunus spinosa*, *Digitalis purpurea*, *Sambucus nigra*, *Rubus fruticosus* agg., *Ligustrum vulgare*, *Dryopteris pseudomas*, *Salix cinerea*, *Anthriscus sylvestris*, *Rumex acetosa*, *Lonicera periclymenum*, *Polypodium vulgare*, *Geranium robertianum*, *Thuidium tamariscinum*, *Hedera helix*, *Galium aparine*, *Urtica dioica*.

N2 Damage: Drainage ditch.

N3 Habitat: Wet grassland area with *Juncus effusus*.

N4 Habitat: Heathland area, on rocky outcrops at the site (possibly long abandoned mine spoil heaps) containing: *Pteridium aquilinum*, *Calluna vulgaris*, *Vaccinium myrtillus*, *Potentilla erecta*, *Cladonia portentosa*, *Lotus uliginosus*, *Festuca rubra*, *Agrostis canina*, *Erica cinerea*, *Anthoxanthum odoratum*, *Ulex europaeus*, *Carex binervis*, *Nardus stricta*, *Crepis* spp., *Pedicularis sylvatica*, *Euphrasia* spp., *Cladonia uncialis*, *Polygala serpyllifolia*, *Succisa pratensis*, *Luzula multiflora*, *Hieracium pilosella* and *Danthonia decumbens*.

N5 Habitat: small remnant bog area occurring on peat, covering on 20x20 m at most. Species present include *Calluna vulgaris*, *Erica tetralix*, *Potentilla erecta*, *Narthecium ossifragum*, *Polytrichum commune*, *Molinia caerulea*, *Carex panicea*, *Succisa pratensis*, *Eriophorum angustifolium*, *Sphagnum squarrosum*, *Hydrocotyle vulgaris*, *Carex rostrata*, *Juncus effusus*, *Sphagnum palustre*, *Carex echinata*, *C. demissa*.

N6 Habitat: Quaking transition mire area with *Carex curta*, *C. nigra*, *Equisetum fluviatile*, *Potentilla palustris*, *Menyanthes trifoliata*, *Calliergonella cuspidata*, *Calliergon stramineum*.

See relevé number 1666 - R1 & R2 for species details. Relevé location: 279459 326110 and 279466 326165 respectively

N7 Habitat: Abandoned mine spoil heaps with little natural vegetation cover.

N8 Habitat: Reed bed swamp composed mainly of *Phragmites australis*. *Nuphar lutea* is emergent in the lake.

NFS Species recorded on site

MFS 2008 Fauna records - Heron (1); Meadow Brown (3); Goldfinch (5); Frog; Fox

NFS Ground Photographic Notes

DSC 2231: P1 - General view of western end of Tassan Lough looking north-westwards, with reed bed zone surround the shore of the lake.

DSC 2233: P2 - Unimproved grassland area to the south east of lake.

DSC 2234: P3 - General view of western end of Tassan Lough looking north-westwards, with reed bed zone surround the shore of the lake and old mine spoil heaps in the distance.

DSC 2238: P4 - Transition mire area on the eastern shore below a bracken covered slope.

DSC 2240: P4 - Detail of the transition mire area on the eastern lake shore.

DSC 2578: P5 - Detail of the dry heathland area on the eastern lake shore.

DSC 2242: P4 - Transition mire area on the eastern shore with *Carex rostrata*.

DSC 2244: P4 - Transition mire area on the eastern shore with *Carex rostrata*.

DSC 2588: P6 - Stone walls the road along the southern edge of the site.

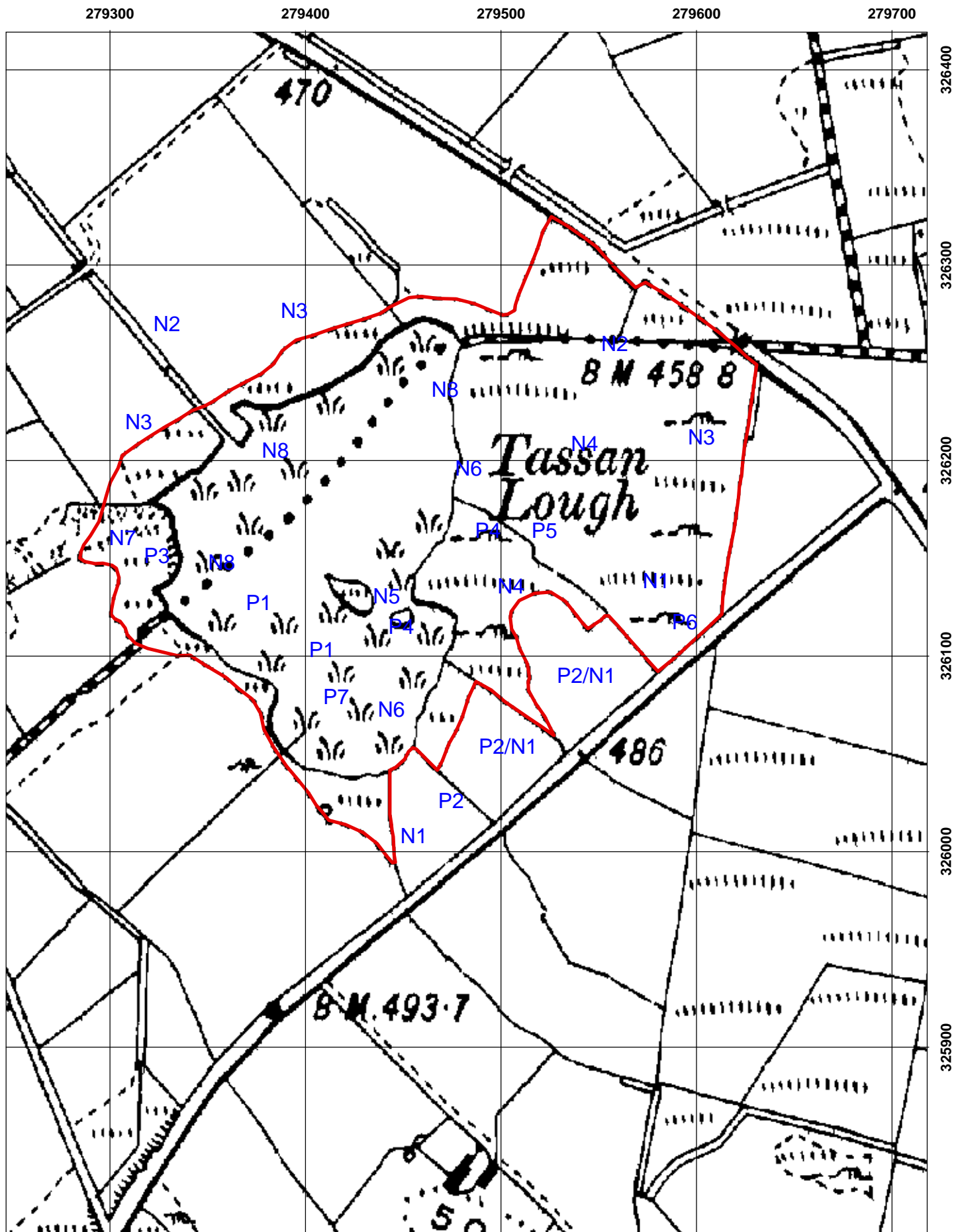
DSC 6684: P7 - Small pool area to the south of the main lake surrounded by *Phragmites* reed bed.
Photograph Patrick Crushell



Site Boundary
1666 Tassan Lough

0 25 50 100 150 200 Meters





 Site Boundary

1666 Tassan Lough

0 25 50 100 150 200 Meters

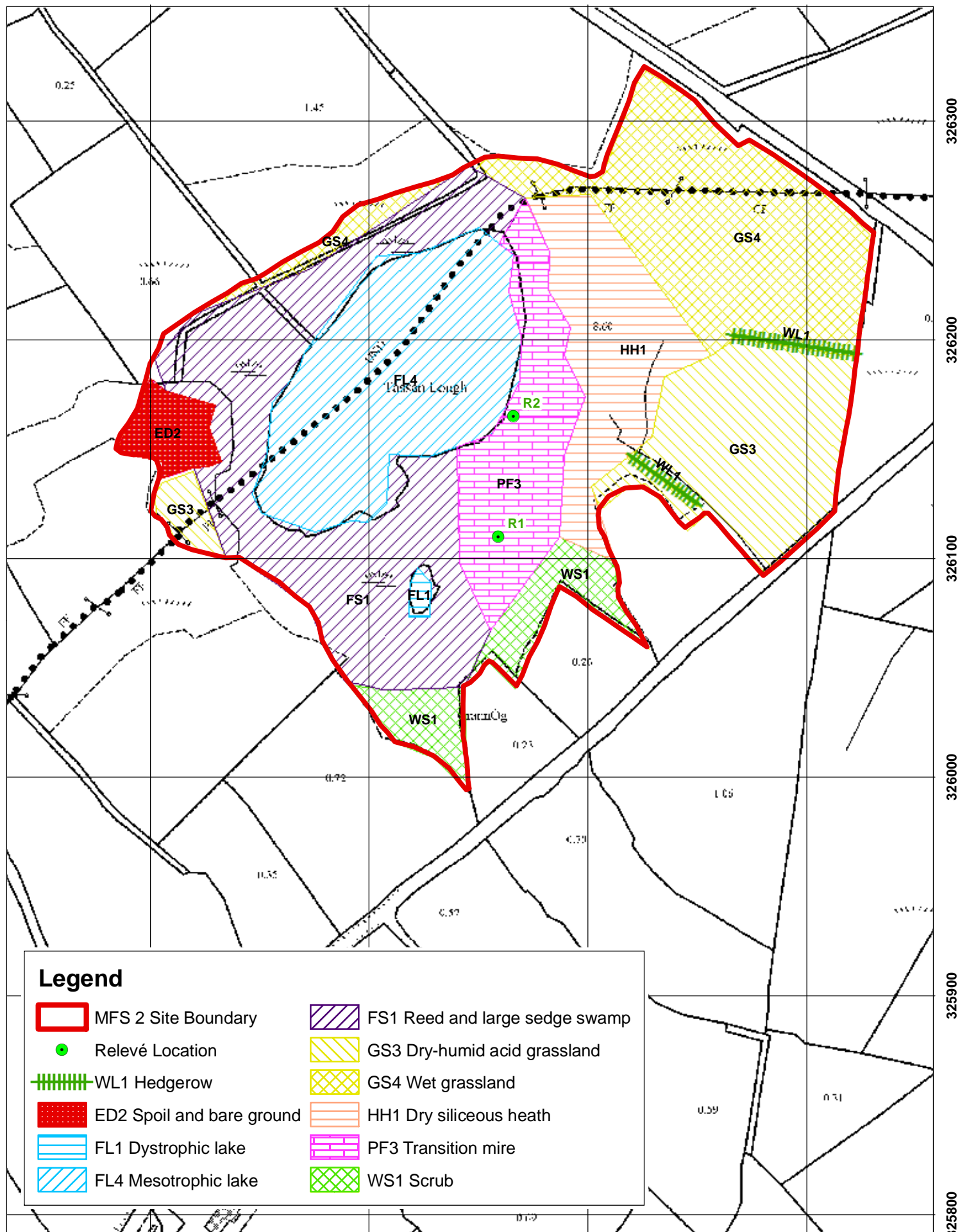


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1666 Tassan Lough

0 25 50 100 150 200 Meters

