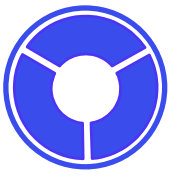




## **APPENDIX 13-6**

**Archaeological Impact  
Assessment of *Proposed Bog  
Decommissioning and  
Rehabilitation at Lisclogher  
West, Carranstown and Bracklin  
West Bogs***



# **Archaeological Impact Assessment of Proposed Bog Decommissioning and Rehabilitation at Lisclogher West Bog, Co. Westmeath**

**Report For**

**Bord Na Móna Energy Ltd.**

**Author**

**Dr. Charles Mount**

**Bord Na Móna Project Archaeologist**



## Introduction

The EPA (2002) *Guidance on the process of preparing and implementing a bog rehabilitation plan* notes that the licensee should characterise the bog prior to embarking on detailed planning and implementation. This characterisation should detail how the land is classified in terms of statutory protections, e.g. as European sites, world heritage sites, RAMSAR sites, National Heritage Areas, national monuments, archaeological heritage, etc. This archaeological impact assessment report was prepared by Dr. Charles Mount for Bord na Móna Energy Ltd to fulfil this characterisation in relation to archaeological heritage. It represents the results of a desk-based assessment of the impact of proposed bog rehabilitation on c.239 hectares at Lisclogher West Bog, Co. Westmeath on the known archaeological heritage of the bog. The proposed rehabilitation actions will be a combination of measures to create wetlands and re-wet deep peat as outlined in the draft Methodology Paper for the proposed Bord na Móna Decommissioning, Rehabilitation and Restoration Scheme. These enhanced measures for Lisclogher West Bog will include:

- Raised bog restoration measures including intensive drain-blocking (7/100 m);
- Modifying outfalls, and management of water levels with overflow pipes and blocking of internal outfalls;
- Regular drain blocking (3/100) on dry cutaway along with the blocking of outfalls and management of water levels;
- Re-wetting the deep peat in the cutover areas of the bog using berms and peat dams. This enhanced measure seeks to create large (c. 45m x 60m) flat areas or cells of shallow (levels at peat surface +/- 10 cm) water conditions on bare areas and vegetated areas of cutover bog;
- Removal of conifer forestry from the high bog (Forest to Bog restoration). A small part of the high bog was planted with conifer forestry. It is proposed to remove this forestry to support raised bog restoration. Trees will be felled and removed, conifer stumps will be “flipped”, the bog surface will be reprofiled (smoothed) and the drains will be blocked to encourage the redevelopment of bog vegetation. This requires engagement and agreement with Coillte and with the Forest Service. This enhanced bog restoration measure is proposed to be carried out as a trial at Lisclogher West to learn new techniques and to inform the feasibility and potential to use these new techniques at other sites to remove conifers (See Appendix XIII).
- Removal of feral self-sown conifer trees from the high bog. Conifers from adjacent plantations have colonised the bog. These trees will be felled to waste to support raise bog restoration.
- Silt control measures will be retained and maintained during the rehabilitation phase. During the monitoring and verification phase silt ponds and silt control measures will be continually inspected and maintained, where appropriate. When it is deemed that silt ponds are not required, as the bog has been successfully stabilised and water quality parameters meet targets the condition of the silt ponds will be reviewed. Silt ponds will either be de-watered (water levels lowered to a level where the silt pond will naturally develop as a small wetland feature), left in situ, or infilled (where discharges do not require silt control).

Lisclogher West Bog is located c.2.6km south of Delvin and there is a minor road running through it for most of its length. The bog rehabilitation area occupies the townlands of Ballyhealy or Ballinure, Bolandstown, Bracklin and Martinstown on OS 6-inch sheet Westmeath No. 14.



## Methodology

This is a desk-based archaeological assessment that includes a collation of existing written and graphic information to identify the likely archaeological potential of Lisclogher West Bog. The extent of the rehabilitation area is indicated in Fig. 1. This area was examined using information from:

- The IAWU Peatland Survey
- The 2005 Peatland Survey
- The Record of Monuments and Places
- The Sites and Monuments Record (SMR) that is maintained by the Dept of Housing, Local Government and Heritage
- The Excavations database
- Previous assessments

An impact assessment has been prepared and recommendations have been made.

## Desktop assessment

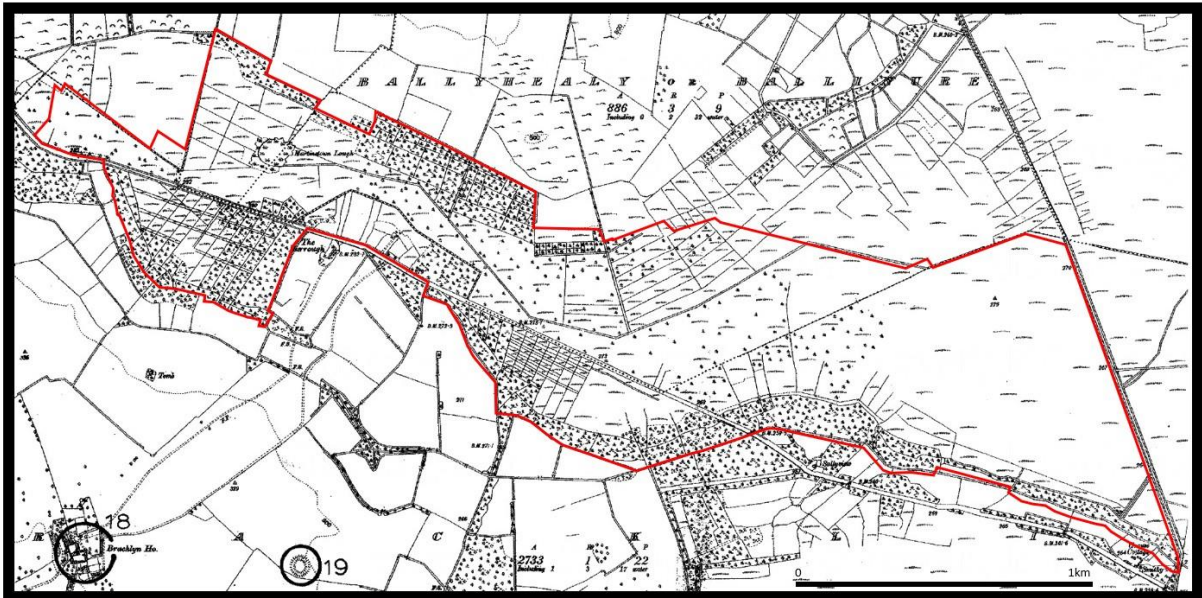


Fig. 1. Lisclogher West Bog, Co. Westmeath, detail of the Record of Monuments and Places map sheets Westmeath No. 14. The proposed rehabilitation area is outlined with the red line.

### Peatland survey

Lisclogher West Bog was not surveyed by the Irish Archaeological Wetland Unit (IAWU).

### Recorded Monuments

The Record of Monuments and Places (RMP) for Co. Westmeath which was established under Section 12 of the National Monuments (Amendment) Act, 1994 was examined as part of the assessment (DAHGI 1997). This record was published by the Minister in 1997 and includes sites and monuments that were known in Lisclogher West Bog before that date. This review established that there are no RMPs located in the proposed rehabilitation area (see Fig. 1).



### **2005 Archaeological Survey of Ireland Peatland Survey**

Lisclogher West Bog was surveyed by ADS Ltd in 2005 as part of the Archaeological Survey of Ireland Peatland Survey (Licence No. 05E0792). No sightings of archaeological heritage were recorded during the fieldwalking survey (Whitaker 2006, 11-12).

### **Archaeological Excavations**

The Excavations Bulletin at excavations.ie was checked for reports of licenced excavations carried out in the rehabilitation area. This indicates that there have been no licenced excavations carried out in the rehabilitation area.

### **Sites and Monuments Record**

The Sites and Monuments Record (SMR) which is maintained by the Department of Housing, Local Government and Heritage was examined as part of the assessment on the 8th of May 2023. This review established that there are no SMRs located in the proposed rehabilitation area (see Fig. 2).



Fig. 2. Lisclogher West Bog, Co. Westmeath, detail of the Sites and Monuments Record. The proposed rehabilitation area is outlined with the red line.

### **Previous assessments**

Lisclogher West Bog has been the subject of an Environmental Impact Assessment Report (EIAR) carried out by Irish Archaeological Consultancy LTD in 2018 for Bord na Móna Energy Limited in relation to IPC Licence P0500-03. This assessment included a review of the topographical files and finds registers of the National Museum of Ireland intended to identify all archaeological objects from the bog reported to the Museum by that date and these are included below in Table 1 (Pers Comm. Jane Whitaker). The assessment noted that there was a potential for archaeological heritage to be uncovered during the course of any future development works in Lisclogher West Bog.

### **Reported finds**

As noted above the EIAR carried out by Irish Archaeological Consultancy LTD in relation to IPC Licence P0500-03 contains a complete list of known archaeological objects from Lisclogher West Bog reported to the National Museum of Ireland up to 2018 (see Table 1).



| Townland   | Museum No./ catalogue No. | Description       |
|------------|---------------------------|-------------------|
| Lisclogher | 1954:54                   | Bronze Axehead    |
| Lisclogher | IA/104/1982               | 14 pieces of wood |

Table 1. List of archaeological finds from Lisclogher West Bog reported to the National Museum of Ireland.

## Impact assessment

There are no known sightings of archaeological material in the rehabilitation area. There are some archaeological objects known from the bog that have been removed to the National Museum (see Table 1).

## Recommendations

There are no known sightings of archaeological monuments in the rehabilitation area. There are some archaeological objects known from the bog that have been removed to the National Museum (see Table 1). Should any previously unknown archaeological heritage be uncovered during the rehabilitation works, it should also be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.

## Conclusion

This is a desk-based archaeological assessment and includes a collation of existing written and graphic information to identify the likely archaeological potential of the proposed rehabilitation area. Lisclogher West Bog was surveyed by ADS Ltd in 2005 as part of the Archaeological Survey of Ireland Peatland Survey and no sightings of archaeological heritage were recorded. There are no known sightings of archaeological monuments in the rehabilitation area. There are some archaeological objects known from the bog that have been removed to the national Museum (see Table 1). Should any previously unknown archaeological heritage be uncovered during the rehabilitation works, it should also be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.

## References

DAHGI 1997. Recorded Monuments Protected under Section 12 of the National Monuments (Amendment) Act, 1994. County Westmeath.

EPA 2020. Guidance on the process of preparing and implementing a bog rehabilitation plan.

Mackin *et al.* 2017. Best practice in raised bog restoration in Ireland. Irish Wildlife Manuals, No. 99. National Parks and Wildlife Service.

Whitaker, J. 2006. Peatland Survey 2005 Allen, Kilberry & Coolnamóna Bogs Counties Kildare, Laois, Meath, Offaly, & Westmeath. Unpublished report for Department of the Environment, Heritage and Local Government.

Dr. Charles Mount  
9 May 2023



**Archaeological Impact Assessment of Proposed Bog  
Decommissioning and Rehabilitation at Carranstown Bog,  
Cos. Meath and Westmeath**

**Draft**

**Report For**

**Bord Na Móna Energy Ltd.**

**Author**

**Dr. Charles Mount**

**Bord Na Móna Project Archaeologist**



## Introduction

The EPA (2020) *Guidance on the process of preparing and implementing a bog rehabilitation plan* notes that the licensee should characterise the bog prior to embarking on detailed planning and implementation. This characterisation should detail how the land is classified in terms of statutory protections, e.g. as European sites, world heritage sites, RAMSAR sites, National Heritage Areas, national monuments, archaeological heritage, etc. This archaeological impact assessment report was prepared by Dr. Charles Mount for Bord na Móna Energy Ltd to fulfil this characterisation in relation to archaeological heritage. It represents the results of a desk-based assessment of the impact of proposed bog rehabilitation of c.305 hectares at Carranstown Bog, Cos. Meath and Westmeath on the known archaeological heritage of the bog. The proposed rehabilitation actions will be a combination of measures to create wetlands and re-wet deep peat as outlined in the draft Methodology Paper for the proposed Bord na Móna Decommissioning, Rehabilitation and Restoration Scheme. These enhanced measures for Carranstown Bog will include:

- Deep Peat measures including field re-profiling, bunding and drain-blocking, resulting in bundled wetlands suitable for Sphagnum inoculation, on deeper peat;
- Intensive drain blocking around shallow peat areas / modelled depressions on little or no peat to create/promote the spread of wetland habitats,
- Modifying outfalls, and management of water levels with overflow pipes and blocking of internal outfalls;
- Regular drain blocking (3/100) on dry cutaway along with the blocking of outfalls and management of water levels;
- Intensive drain blocking (7/100) in areas to develop wetlands in areas of shallow peat. Measures include the blocking of outfalls, management of water levels and transplanting reeds and other rhizomes;
- Berms and field re-profiling (45m x 60m cell) in deep peat areas, along with blocking outfalls and managing overflows with a controlled weir outfall, includes drainage channels for excess water and Sphagnum inoculation;
- Targeted fertiliser applications to accelerate vegetation establishment on areas of bare peat on headlands and high fields, and within certain areas of dry cutaway. Areas where vegetation has established do not need fertiliser application.
- Seeding of vegetation and inoculation of Sphagnum will be undertaken where required.

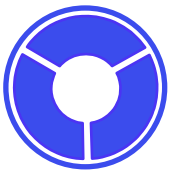
Carranstown Bog is located c.1.7km northwest of Ballivor, Co. Meath, and north of the R156 road. The overall rehabilitation area occupies the townlands of Grangemore, Co. Westmeath and Carranstown Great and Little and Killaconnigan, Co. Meath on OS 6 inch sheets Meath No. 35 and Westmeath No. 21.

## Methodology

This is a desk-based archaeological assessment that includes a collation of existing written and graphic information to identify the likely archaeological potential of Carranstown Bog. The overall extent of the rehabilitation is indicated in Fig. 1. This area was examined using information from:

- Archaeological Survey of Ireland Peatland 2005
- The Sites and Monuments Record that is maintained by the Dept of Housing, Local Government and Heritage
- The topographical files of the National Museum of Ireland.
- The Excavations database
- Previous assessments





An impact assessment has been prepared and recommendations have been made.

## Desktop assessment

### Recorded Monuments

The Record of Monuments and Places (RMP) for Cos. Meath and Westmeath which was established under Section 12 of the National Monuments (Amendment) Act, 1994 was examined as part of the assessment (DAHGI 1996 and 1997). These records were published by the Minister in 1996 and 1997 and includes sites and monuments that were known in Carranstown Bog before that date. This review established that there are no RMPs located in the proposed rehabilitation area (see Fig. 1).

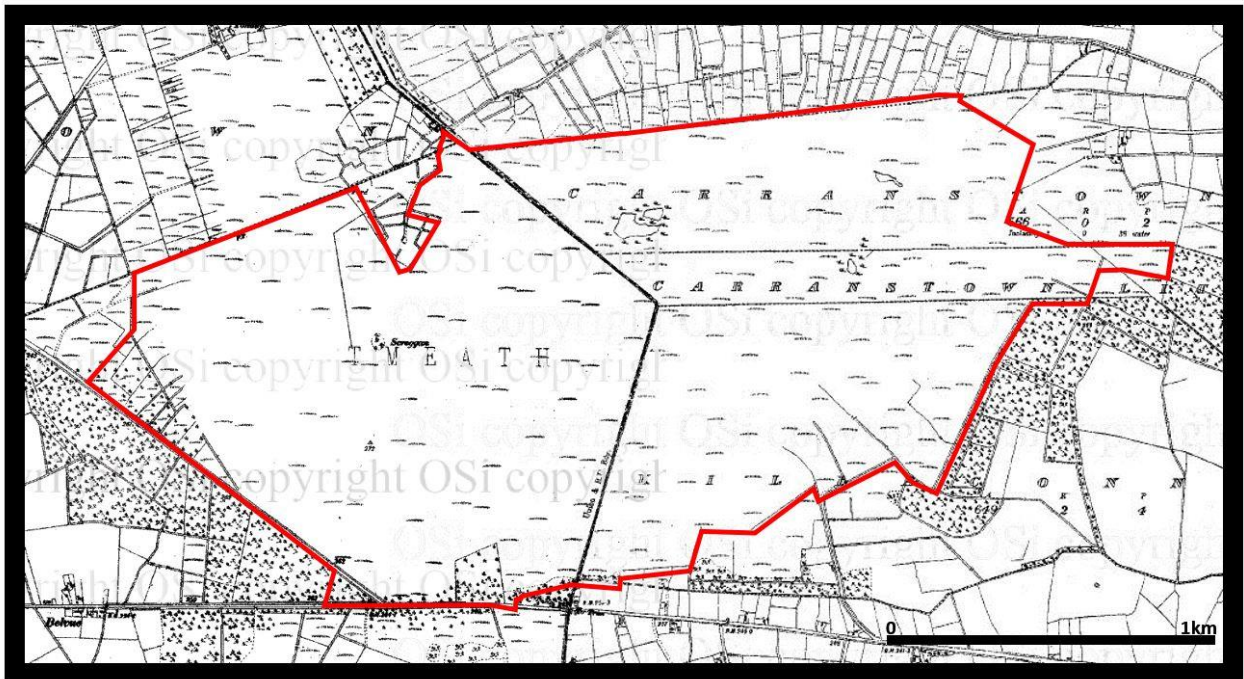


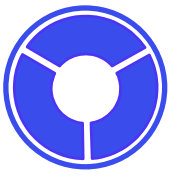
Fig. 1. Carranstown Bog, detail of the Record of Monuments and Places map sheets Meath No. 35 and Westmeath No. 21. The proposed rehabilitation area is outlined with the red line. There are no Recorded Monuments in the rehabilitation area.

### Archaeological Survey of Ireland Peatland 2005

In 2005 Carranstown Bog was the subject of a peatland survey (Licence No. 05E0794). The bog was field walked by ADS Ltd at two drain intervals with the exception of the overgrown area which was walked at roughly 30m intervals. No archaeological material was recorded during this survey (Whitaker 2005, 12).

### Sites and Monuments Record

The Sites and Monuments Record (SMR) which is maintained by the Department of Housing, Local Government and Heritage was examined as part of the assessment on the 16th of November 2021. The SMR consists of records included in the RMP and sites and monuments notified to the Dept. since the publication of the RMP. This review established that there are no entries in the SMR in the proposed rehabilitation area (see Fig. 2).



### Reported finds

The topographical files of the National Museum of Ireland were searched for records of finds from the bog in x 2021. There have been no finds reported to the Museum from the rehabilitation area.

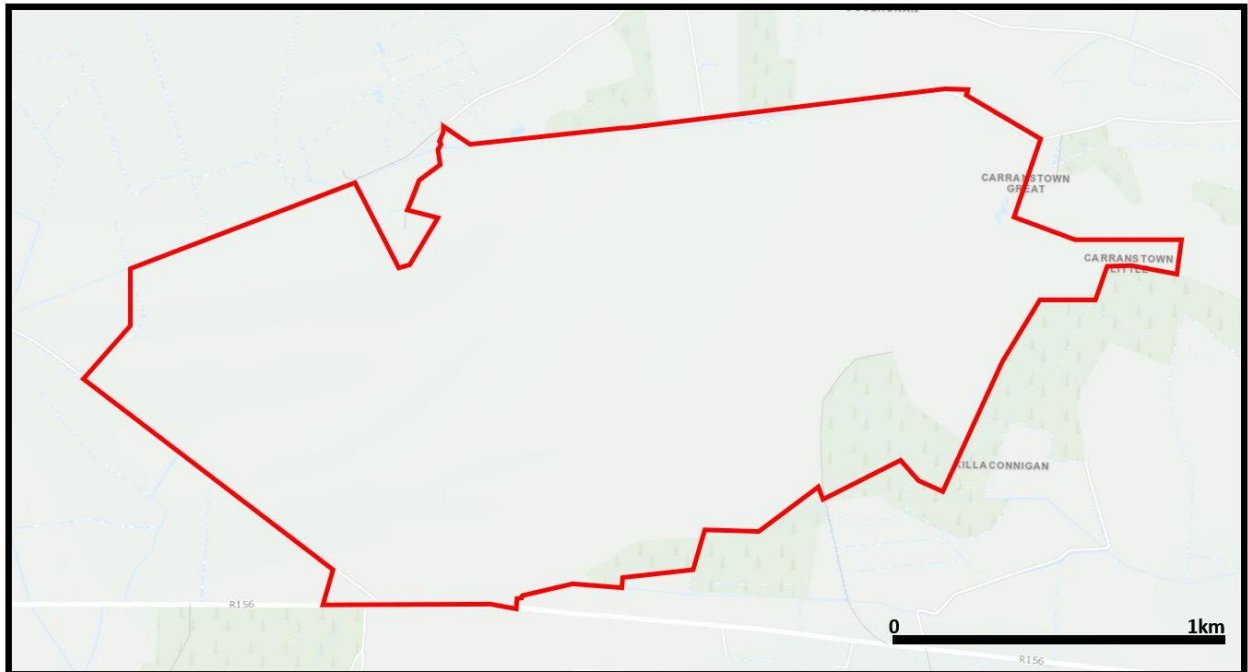


Fig. 2. Carranstown Bog, Cos. Meath and Westmeath, detail of the Sites and Monuments Record. The proposed rehabilitation area is outlined with the red line. There are no SMRs in the rehabilitation area.

### Archaeological investigations

Reports of archaeological excavations and licensed monitoring in the study area listed in the excavations database at [excavations.ie](http://excavations.ie) were examined as part of the assessment. There are no additional reports of archaeological investigation carried out in the rehabilitation area.

### Previous assessments

Carranstown Bog has been the subject of an Environmental Impact Assessment Report carried out by Irish Archaeological Consultancy LTD in 2018 for Bord na Móna Energy Limited in relation to IPC Licence P0500-01. The assessment noted that no archaeological material has been identified in Carranstown Bog and noted that there was a potential for archaeological features to be uncovered during the course of any future development works in the bog.

### Impact assessment

There is no known archaeological material in Carranstown Bog.

### Recommendations

There is no known archaeological material in Carranstown Bog. Should any previously unknown archaeological material be uncovered during the rehabilitation works, it should be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.



## Conclusion

This is a desk-based archaeological assessment and includes a collation of existing written and graphic information to identify the likely archaeological potential of the proposed rehabilitation area. There is no known archaeological material in Carranstown Bog. Should any previously unknown archaeological material be uncovered during the rehabilitation works, it should be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.

## References

DAHGI 1996. Recorded Monuments Protected under Section 12 of the National Monuments (Amendment) Act, 1994. County Meath.

DAHGI 1997. Recorded Monuments Protected under Section 12 of the National Monuments (Amendment) Act, 1994. County Westmeath.

EPA 2020. Guidance on the process of preparing and implementing a bog rehabilitation plan.

Whitaker, J. 2006. Peatland Survey 2005 Allen, Kilberry & Coolnamóna Bogs Counties Kildare, Laois, Meath, Offaly, & Westmeath. Unpublished report for the Department of the Environment, Heritage and Local Government.

Dr. Charles Mount  
18 November 2021



# **Archaeological Impact Assessment of Proposed Bog Decommissioning and Rehabilitation at Bracklin West Bog, Co. Westmeath**

**Report For**

**Bord Na Móna Energy Ltd.**

**Author**

**Dr. Charles Mount**

**Bord Na Móna Project Archaeologist**



## Introduction

The EPA (2002) *Guidance on the process of preparing and implementing a bog rehabilitation plan* notes that the licensee should characterise the bog prior to embarking on detailed planning and implementation. This characterisation should detail how the land is classified in terms of statutory protections, e.g. as European sites, world heritage sites, RAMSAR sites, National Heritage Areas, national monuments, archaeological heritage, etc. This archaeological impact assessment report was prepared by Dr. Charles Mount for Bord na Móna Energy Ltd to fulfil this characterisation in relation to archaeological heritage. It represents the results of a desk-based assessment of the impact of proposed bog rehabilitation on c.750 hectares at Bracklin West Bog, Co. Westmeath on the known archaeological heritage of the bog. The proposed rehabilitation actions will be a combination of measures to create wetlands and re-wet deep peat as outlined in the draft Methodology Paper for the proposed Bord na Móna Decommissioning, Rehabilitation and Restoration Scheme. These enhanced measures for Bracklin West Bog will include:

- A widespread drain-blocking programme will be implemented across the cutaway, where possible. This will have to be planned in association with the wind farm infrastructure. In general, field drains will be blocked where possible to re-wet cutaway and re-wet to the optimum water-level. More intensive measures will be targeted towards the bare peat.
- In areas of deeper peat, berms and field reprofiling will be carried out to create 45m x 60m cells. These will be carried out in deep peat areas where water has potential to be retained within the cell. Measures will also entail blocking outfalls, managing overflows, creating drainage channels for excess water and carrying out Sphagnum inoculation.
- Less intensive measures (targeted drain-blocking) will be used in areas where habitats have already established.
- Measures will include drain blocking (3/100 m), modifying outfalls and managing water levels with overflow pipes;
- Wetland measures including blocking outfalls and managing water levels with overflow pipes.

Bracklin West Bog is located c.2.9km north of Raharney and east of the L1504 road. The bog rehabilitation area occupies the townlands of Ballynaskeagh, Bracklin, Craddanstown, Killagh, and Mucklin on OS 6 inch sheets Westmeath Nos. 13, 14, 20 and 21.

## Methodology

This is a desk-based archaeological assessment that includes a collation of existing written and graphic information to identify the likely archaeological potential of Bracklin West Bog. The extent of the rehabilitation area is indicated in Fig. 1. This area was examined using information from:

- The IAWU Peatland Survey
- The 2005 Bord na Móna Survey
- The Record of Monuments and Places
- The Sites and Monuments Record (SMR) that is maintained by the Dept of Housing, Local Government and Heritage
- The Excavations database
- Previous assessments

An impact assessment has been prepared and recommendations have been made.



## Desktop assessment

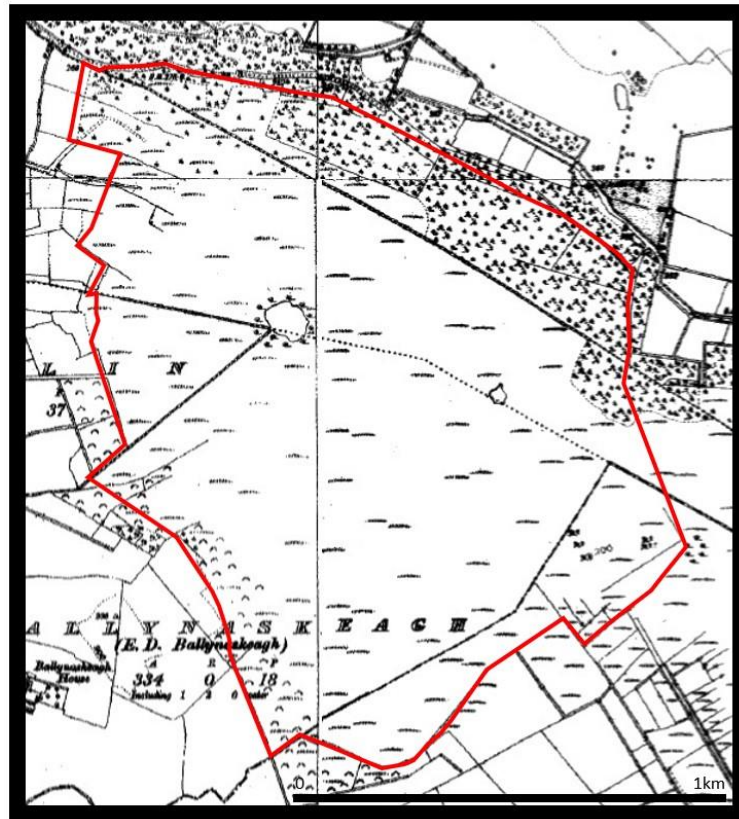


Fig. 1. Bracklin West Bog, Co. Westmeath, detail of the Record of Monuments and Places map sheets Westmeath Nos. 13, 14, 20 and 21. The proposed rehabilitation area is outlined with the red line.

### Peatland survey

Bracklin West Bog was not surveyed by the Irish Archaeological Wetland Unit (IAWU).

### Recorded Monuments

The Record of Monuments and Places (RMP) for Co. Westmeath which was established under Section 12 of the National Monuments (Amendment) Act, 1994 was examined as part of the assessment (DAHGI 1997). This record was published by the Minister in 1997 and includes sites and monuments that were known in Bracklin West Bog before that date. This review established that there are no RMPs located in the proposed rehabilitation area (see Fig. 1).

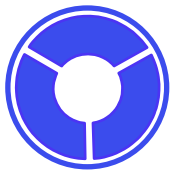
### 2005 Archaeological Survey of Ireland Peatland Survey

Bracklin West Bog was surveyed by ADS Ltd in 2005 as part of the Archaeological Survey of Ireland Peatland Survey (Licence No. 05E0793). No sightings of archaeological material were recorded during the fieldwalking survey (Whitaker 2006, 11-12).

### Archaeological Excavations

The Excavations Bulletin at excavations.ie was checked for reports of licenced excavations carried out in the rehabilitation area. This indicate that there have been no licenced excavations carried out in the rehabilitation area.





### Sites and Monuments Record

The Sites and Monuments Record (SMR) which is maintained by the Department of Housing, Local Government and Heritage was examined as part of the assessment on the 1st of February 2023. This review established that there are no SMRs located in the proposed rehabilitation area (see Fig. 2).



Fig. 2. Bracklin West Bog, Co. Westmeath, detail of the Sites and Monuments Record. The proposed rehabilitation area is outlined with the red line.

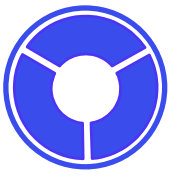
### Previous assessments

Bracklin West Bog has been the subject of an Environmental Impact Assessment Report (EIAR) carried out by Irish Archaeological Consultancy LTD in 2018 for Bord na Móna Energy Limited in relation to IPC Licence P0500-03. This assessment included a review of the topographical files and finds registers of the National Museum of Ireland intended to identify all finds from the bog reported to the Museum by that date and these are included below in Table 1 (Pers Comm. Jane Whitaker). The assessment noted that there was a high potential for archaeological features to be uncovered during the course of any future development works in Bracklin West Bog.

### Reported finds

As noted above the EIAR carried out by Irish Archaeological Consultancy LTD in relation to IPC Licence P0500-03 contains a complete list of known finds from Bracklin West Bog reported to the National Museum of Ireland up to 2018 (see Table 1).

| Townland | Museum No./ catalogue NO. | Description |
|----------|---------------------------|-------------|
| Bracklin | 1964:83                   | Wooden lid  |



|          |          |                          |
|----------|----------|--------------------------|
| Bracklin | 1959:31  | Bronze sword blade       |
| Bracklin | 1959:09  | Neolithic pottery vessel |
| Bracklin | 1962:243 | Polished stone axehead   |

Table 1. List of archaeological finds from Bracklin Bog reported to the National Museum of Ireland.

## Impact assessment

There are no known sightings of archaeological material in the rehabilitation area. There are some finds known from the bog (see Table 1).

## Recommendations

There are no known sightings of archaeological material in the rehabilitation area. There are some finds known from the bog (see Table 1). Should any previously unknown archaeological material be uncovered during the rehabilitation works, it should also be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.

## Conclusion

This is a desk-based archaeological assessment and includes a collation of existing written and graphic information to identify the likely archaeological potential of the proposed rehabilitation area. Bracklin West Bog was surveyed by ADS Ltd in 2005 as part of the Archaeological Survey of Ireland Peatland Survey and no sightings of archaeological material were recorded. There are no known sightings of archaeological material in the rehabilitation area. There are some finds known from the bog (see Table 1). Should any previously unknown archaeological material be uncovered during the rehabilitation works, it should also be avoided and reported to the Bord na Móna Archaeological Liaison Officer and the National Museum of Ireland.

## References

DAHGI 1997. Recorded Monuments Protected under Section 12 of the National Monuments (Amendment) Act, 1994. County Westmeath.

EPA 2020. Guidance on the process of preparing and implementing a bog rehabilitation plan.

Mackin *et al.* 2017. Best practice in raised bog restoration in Ireland. Irish Wildlife Manuals, No. 99. National Parks and Wildlife Service.

Whitaker, J. 2006. Peatland Survey 2005 Allen, Kilberry & Coolnamóna Bogs Counties Kildare, Laois, Meath, Offaly, & Westmeath. Unpublished report for Department of the Environment, Heritage and Local Government.

Dr. Charles Mount  
1 February 2023